

none
22 Feb 41

ATLANTIC FISHERMAN

VOL. XXI

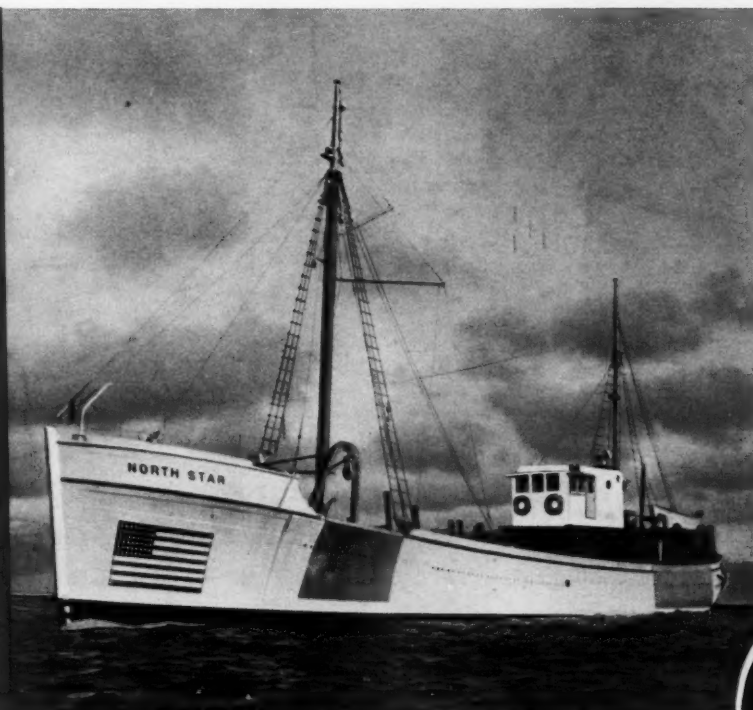
Registered U. S. Patent Office
JANUARY, 1941

NO. 12

"NORTH STAR"

... the newest vessel to
join the long line of trawlers
that depend on Columbian Rope.

Built by Snow Shipyards,
Rockland, Maine



THE sleek trawler "North Star," newest addition to the fleet owned by O'Hara Bros. Co., Inc. of Boston, Mass., joins the long line of famous vessels that depend on Columbian cordage. This new trawler is completely equipped with Columbian Pure Manila Rope.

Today, more and more ships are selecting Columbian cordage for their important jobs. Columbian builds dependability into its rope. Made of top grade pure manila fibres chosen by our own buyers residing in the Philippines, it is quality controlled every step of the way. In our modern mill this rope is carefully water proofed and lubricated—two exclusive Columbian processes which assure you: (1) A more flexible, "live" rope in all kinds of weather. (2) A longer wearing rope protected against unnecessary friction and decay.

COLUMBIAN ROPE COMPANY

Auburn.

"The Cordage City"

New York

**Depend On
COLUMBIAN
For Your
TOUGH JOBS**

**QUALITY
Controlled**
every step of the way

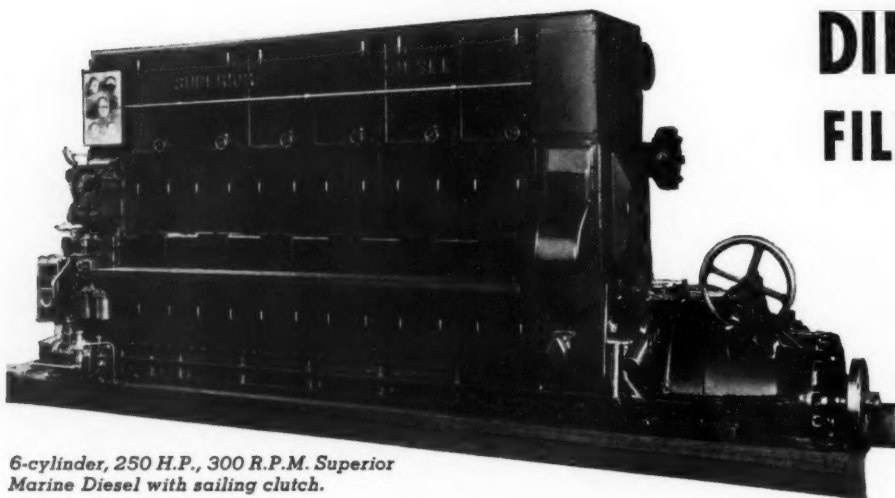
**COLUMBIAN TAPE-MARKED
PURE MANILA ROPE**

Boston Office and Warehouse

38 Commercial Wharf

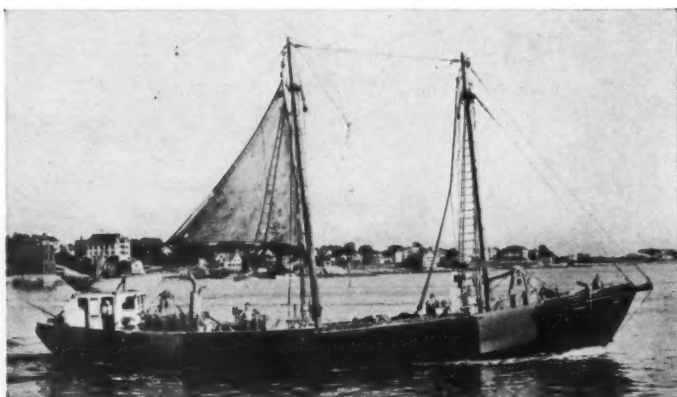
ATLANTIC FISHERMAN

WATCH THE *Superior* HEAVY DUTY DIESELS FILTER INTO THE ATLANTIC FISHING FLEET



6-cylinder, 250 H.P., 300 R.P.M. Superior Marine Diesel with sailing clutch.

Every Atlantic Coast Fisherman is sure to find the engine he needs in the Superior line and he will make no mistake if he finds out about some of the newer models that are especially suited to swinging a big, slow-speed wheel in the heavy hulls that have to keep going day after day to make it pay. And don't forget, these engines are real marine engines, not newly conceived conversions.

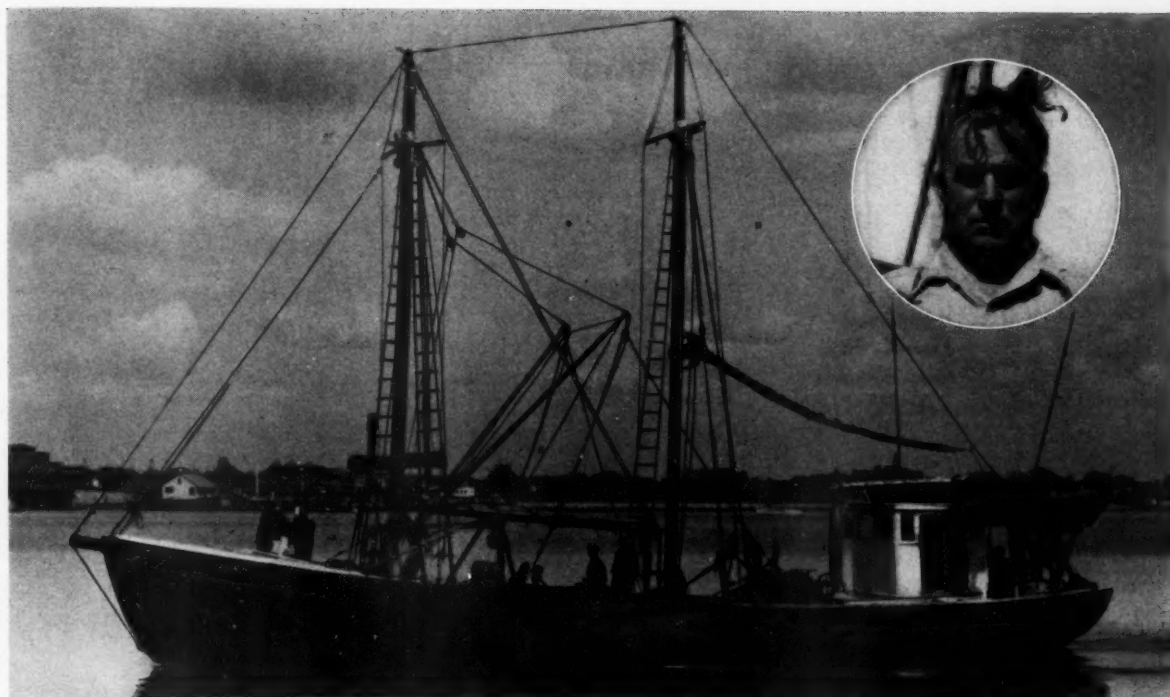


Thomas J. Benham's "GOVERNOR SALTONSTALL" of Gloucester



T H E N A T I O N A L S U P P L Y C O M P A N Y
SUPERIOR ENGINE DIVISION

FACTORIES: Springfield, Ohio; Philadelphia, Pa. • SALES OFFICES: Springfield, Ohio; Philadelphia, Pa.; New York, N. Y.; Los Angeles, Cal.; Jacksonville, Fla.; Houston, Texas



ATLAS DIESEL *'Runs Like a Clock, and is giving good Service'*



The 75' New Bedford scallop dragger "Shannon", is owned and skippered by Capt. J. W. Murphy, and powered by a 110 H.P. Atlas Diesel which turns a 48" x 38" Columbian propeller, giving the boat a cruising speed of 9 knots at 325 R.P.M. She fishes on Georges Bank, about 165 miles from New Bedford. Her average time to and from the bank is 19½ hours.

Commenting on his Atlas Diesel, Capt. Murphy says: "We think the Atlas is a fine engine and are very well pleased with it. It runs like a clock, and is giving good service, very economically. We haven't spent a cent on repairs yet. We were in two of the worst storms last winter and pulled through both without any trouble. During one of these an 85 mile gale blew all night. During a recent engine check-over, we found the bearings to be perfect, the valves in good shape, and none of the rings stuck."

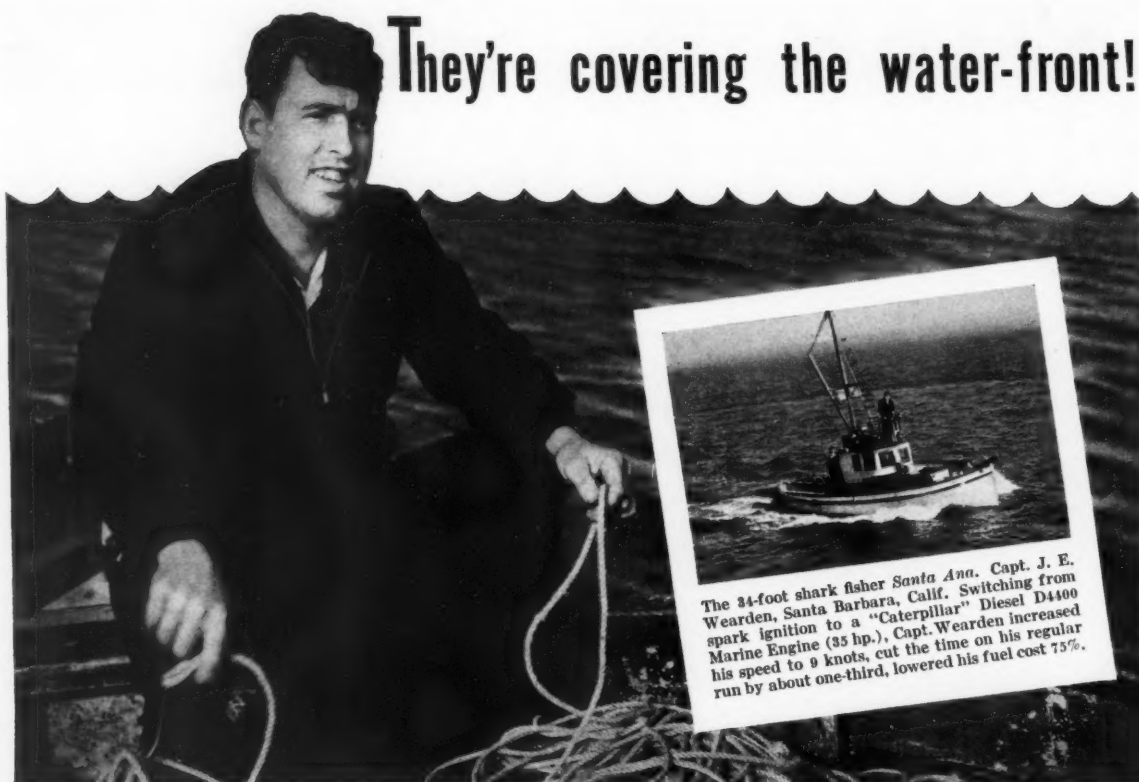
ATLAS IMPERIAL DIESEL ENGINE CO.

EASTERN DIVISION . . . 115 BROAD STREET, NEW YORK, N.Y.
CENTRAL DIVISION . . . 228 NO. LA SALLE ST., CHICAGO, ILL.

SOUTHWESTERN DIVISION . . . 5726 NAVIGATION BLVD., HOUSTON, TEXAS
WESTERN DIVISION . . . 1000 NINETEENTH AVENUE, OAKLAND, CALIF.

ATLAS *Imperial* DIESEL ENGINES

They're covering the water-front!



The 34-foot shark fisher *Santa Ana*. Capt. J. E. Wearden, Santa Barbara, Calif. Switching from spark ignition to a "Caterpillar" Diesel D1400 Marine Engine (35 hp.), Capt. Wearden increased his speed to 9 knots, cut the time on his regular run by about one-third, lowered his fuel cost 75%.

"Caterpillar" Diesel Marine Engines have come up to the top ranks of popular fishing-boat power! And the reasons are easily found. They have ten years of Diesel experience behind them — plus twenty-five more years of experience in building other types of heavy-duty engines. They deliver full-load, full-speed power 24 hours a day . . . and use low-priced, low-grade, non-premium fuel. They're built for long-term, economical, efficient service—with "Hi-Electro" hardening for cylinder liners, crankshaft and other parts that have the toughest jobs. Simple in design. Have no working adjustments on the fuel system. Require no tinkering. *They're money-makers from the word go!* Your "Caterpillar" dealer has more information, or write direct to the factory.

CATERPILLAR TRACTOR CO., PEORIA, ILL.

CATERPILLAR
REG. U.S. PAT. OFF.

Diesel

MARINE ENGINES



The 36-foot *Liberty*, of Provincetown, Massachusetts, owned by Capt. Henry H. Passion—powered by a "Caterpillar" Diesel D13000 Marine Engine (100 hp.). The engine also operates the *Liberty's* Hathaway deck winch.



Capt. Henry H. Passion, whose *Liberty* is shown at left. It is used 50 miles off Cape Cod. "This calls for a dependable, powerful engine . . . and we have to show a profit," he writes. "The 'Caterpillar' Diesel fills the berth."



Willard-Daggett Co., Portland, Me., says the 100-hp. "Caterpillar" Diesel D13000 in the 70-foot *Eleanor* is the best engine they've ever had. Switched from another type Diesel. Now uses only 5 gallons of 7 1-5c fuel an hour!



The herring-seiner *Passing Cloud*, owned by Johnson Bros., of Ocean Falls, British Columbia, Canada. Powered by a "Caterpillar" Diesel D17000 Marine Engine (135 hp.). Running free, the *Passing Cloud* makes 9½ knots.

ATLANTIC FISHERMAN

REGISTERED U. S. PATENT OFFICE

Published Monthly at 92 West Central St., Manchester, N. H.

ATLANTIC FISHERMAN, INC., Goffstown, N. H.

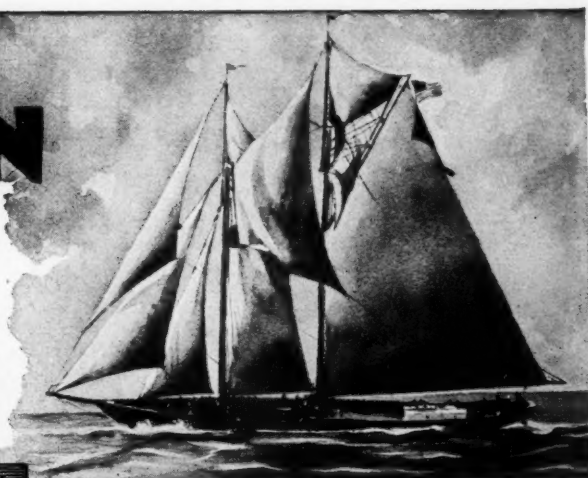
P. G. LAMSON, *Publisher and Editor*

GARDNER LAMSON, *Field Editor*

10 cents a copy \$1.00 a year

Entered as Second Class Matter February, 1925, at the Post Office at Manchester, N. H., under the act of March 3, 1879. Entered as Second Class Matter at the Post Office Department, Ottawa, Can.

Covering the Production, Processing and Distribution of Fresh, Frozen, Filleted, Canned, Dried, Smoked, Salted and Packaged Fish and Shellfish.



VOL. XXI

JANUARY 1941

NO 12

Fishery Industry in Event of National Emergency

Fishery Advisory Committee as National Defense Agency

ON January 31 at 9:00 A.M. in the Secretary's conference room in the South Building of the Department of the Interior, Washington, D. C., there will be held a meeting of the members of the Fishery Advisory Committee, representatives of fishery associations, and other persons. This meeting is being held to discuss the extent to which the Federal Government can expect organized assistance from the fishery industry in the event of a National emergency. It is anticipated that at this meeting the industry may consider it desirable to form a National organization for the purpose of providing co-operation.

With the Federal Government constantly increasing its efforts to prepare the country in behalf of National defense, it has appeared desirable to consider in what way the Fishery Advisory Committee can contribute to a Federal fishery program in National defense.

During the participation of the United States in the World War of 1914-1918 the fishery industries became active in assisting the country in the performance of the tasks at hand.

The many persons in the fishery industries contributed earnings, manpower, and personal co-operation as did the rest of the country during the emergency. In addition, fishermen with their varied craft aided the coastal defenses in watchfulness to detect enemy encroachments along our coasts.

As a unit engaged in the production and handling of food, the fishery industries did a great deal more. Through the Food Administration, they took their place along with agriculture in furnishing more and more food, and preparing, handling, and distributing it without excess waste or profit. Processors, handlers, wholesalers, jobbers, and fishermen, under license, placed their activities under Government control through a system of voluntary agreement and compulsory regulation (Act of August 10, 1917). Processors of canned salmon, sardines, and tuna were regulated as to prices of canned fish and for raw fish; wholesalers and jobbers of non-perishable food commodities were restricted as to margins of profit, their resales were limited, and they were required to keep goods moving in a direct line from the producer to the consumer; retailers maintained reasonable profit margins; handlers of perishable commodities were required to unload their products promptly and dispose of them freely; cold storage operators kept rates within reason; and salt-water fishermen were licensed and given every assistance in their production of food supplies. Federal salt-water fishing regulations were substituted for State laws to permit enlarged production of salt-water fish and shellfish, gear restrictions and season limitations were removed, the use of more effi-

cient gear was encouraged, and other adjustments were made to allow greater production from the fisheries.

Plans to allow for continued provision of fishery products to the country are desirable in any program for National defense. It appears necessary that what adaptation of population, industry, and equipment is planned for defense must be planned with the continued operation of the fisheries in mind.

The Fish and Wildlife Service can provide to advantage special information and planning for National defense, and plans for action can be formulated by the Fish and Wildlife Service with a reasonable expansion of responsibility and activity, but a comprehensive program of action cannot be placed in operation without co-operation from other agencies.

The use of fishing vessels, plants, and other equipment for defense purposes must be arranged by contact with and co-operation of certain segments of the fishery industries; the installation of improved methods of production, processing, and storage, and observance of recommended conservation devices, prohibitions, and expansions must be accomplished through co-operation with State officials, the fishery industries, and other Government agencies; and the elimination of waste in fish marketing and the maintenance of reasonable price levels must be accomplished by co-operation with fish producers, handlers, and consumers.

The element of co-operation essential to the success of a broad defense program involving use of the fishery resources may be obtained by Federal officials locally as assistance is needed or it may be provided in a co-operative program through a special organization of all interested agencies. The latter system promises the greatest degree of co-operation. If such a co-operative body is desired, the Fishery Advisory Committee could well be used in that capacity.

The Fishery Advisory Committee is already operating nationally and in regional subcommittees. Regional and National problems are being continuously analyzed by the group. For use in National defense the organization could be fitted with increased powers for co-operation.

The National organization of the Fishery Advisory Committee could be changed to adapt it for service in National defense. While the main body of the Committee could continue its general meetings annually, meetings of selected defense representatives could be held more frequently. Such meetings could occur as required to provide adequate contact with the Fish and Wildlife Service, the Defense Commission, and other agencies with which co-operation could be arranged to advantage.

Alternating Current Machinery For Fishing Boats

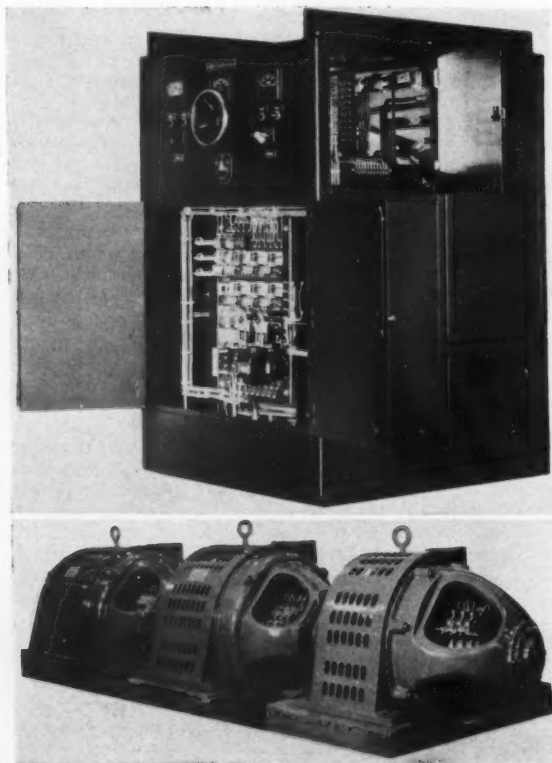
By H. C. Coleman, Manager Marine Electrical Engineering, Westinghouse Electric & Mfg. Co.

PAUSING at the close of a busy year—a period of ship-building activity which has not been equalled in twenty years—it is interesting to review some of the forward looking steps which have been taken in the application of electrical developments on shipboard.

The 1940 developments show greater activity in connection with Diesel propulsion using alternating current machinery indicates a definite trend in this direction with promise of further important developments in the near future. There is also indication of a greater trend toward the use of alternating current auxiliaries wherever possible on all types of vessels. Most of the new construction employs dead front switchboards for the ship's auxiliary plant, and this type of board seems to have become thoroughly established. It is a great improvement over the old live front boards both in appearance and in protection.

Probably the most outstanding installation of the year, from the standpoint of pioneering and departure from the usual, was the Diesel electric propulsion plant on the tuna clipper *Challenger*. To our knowledge this is the first American Diesel propulsion job to utilize alternating current electrical transmission.

The system used on this boat was planned by James N. Johnson, Manager of the San Diego Marine Construction Co., builders of the vessel. Reports of operating since the *Challenger* was completed in June indicate the soundness of Mr. Johnson's convictions that his unique arrangement would prove satisfactory and have many advantages for this particular service.



TOP: Control unit aboard the "Challenger", providing three points of speed control for each of the motor units, with proper transition points. BOTTOM: Mounted on a common bedplate, three wound-rotor motors in tandem drive the vessel's single propeller.

Three AC Motors Drive Propeller

The power plant of this vessel consists of 2 175 kw. and 1 125 kw., 440 volt, 3 phase, 60 cycle constant speed Diesel driven generators. These units operate in parallel on a common power bus which feeds not only the propulsion motors but the ship's auxiliaries. The vessel has a single propeller driven by a propulsion unit consisting of a herringbone type reduction gear having a ratio of 5.8/1, the pinion being coupled to three wound rotor induction motors coupled together in tandem. The first motor, the one coupled to the gear, is rated 500 hp. at 1175 rpm., (6 poles) the second motor 250 hp. at 880 rpm. (8 poles) and the third motor 60 hp. at 500 rpm. (14 poles).

Control for the propulsion unit consists of a simple motor operated drum controller remotely controlled from a desk in the pilot house. This drum controller provides the proper sequence connections to the three propelling motors as well as the proper secondary control for each unit. It provides three points of speed control by means of secondary resistors for each of the motor units. In starting up from rest, the controller connects the 60 hp. motor to the main power bus with all resistance connected in the secondary of the motor. The motor is gradually accelerated to synchronous speed, 500 rpm., by short circuiting the resistance steps in the secondary. The controller then provides transition to the 250 hp. motor, connecting it across the ship's bus with all secondary resistance in the circuit. This motor is then accelerated to synchronous speed, 880 rpm., after which the 500 hp. motor is connected to the bus and accelerated to full speed.

Since the controller is driven by a motor, the proper time element for acceleration is provided regardless of the speed of operation of the master control lever in the pilot house. It is, of course, possible to stop and run continuously on any of the 12 operating points. This control therefore gives three operating speeds with no secondary resistance loss and the overall efficiency of the propelling unit is relatively high.

Heavy Auxiliary Load

The advantages of this drive over other types previously used are numerous. A vessel of this type has a relatively high auxiliary load in comparison to the capacity of the propelling plant. In addition, this auxiliary load varies over a considerable range depending upon whether the ship is going to the fishing grounds or returning with a full load, the maximum load of course being on the return trip when refrigeration requires approximately 100 kw. The system used on this boat gives complete flexibility as to division of the capacity of the power plant between auxiliaries and propulsion as all power is taken from the constant voltage bus. Thus, when returning with a load, the ship is operated on the 250 hp. propulsion motor and the remaining power of the generating plant is utilized for refrigeration and other auxiliaries.

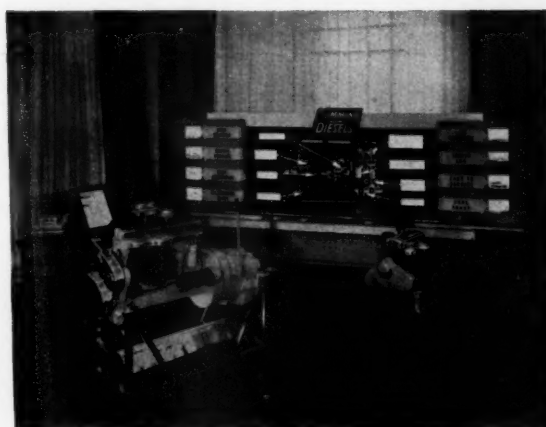
The alternating current system provides the utmost in simplicity of the equipment and minimum weight, space and cost not only on the propulsion plant, but on all of the auxiliaries. The system also gives a greater flexibility in speed control on the propeller than is possible with direct Diesel drive. The use of the three motors with proper pole combinations permits maneuvering without drawing excessive currents from the limited capacity generator plant and thus protects against undesirable disturbances to voltage for lights and auxiliary power.

Make Record Catch

On the first fishing trip after completion of trials, the vessel made a very successful cruise, bringing back a capacity load of fish. The owner was enthusiastic about the way the boat handled and the effects on the fishing methods. Because of the ability to control the speed and the lack of noise and disturbance, they were able to make a record catch and in one day caught and loaded 50 tons of fish. This being the first alternating current Diesel electric installation, it will be watched with considerable interest.



The Buda exhibit of seven engines, with the featured attraction in the center background being Buda's largest Diesel, a Model 6DHM-1879 of 248 hp., 6½" bore and 8¾" stroke.



The background of the Cummins display showed cutaways of the fuel pump and injection system, and along the sides were action photographs of Cummins powered boats.

Reviewing the Motor Boat Show

Highlights of New and Improved Products for Fishing Boat Owners

WINTER'S spectacular nautical exposition, the National Motor Boat Show, opened in Grand Central Palace on January 10 for its annual eight-day run. Following is a brief description of some of the exhibits featuring equipment and supplies of interest to fishing boat owners. *Atlantic Fisherman* will gladly furnish the addresses of any firms about whose products you would like further details.

Buda Shows Larger Models

This year the exhibit of The Buda Company included several larger type Diesels, and in order to accommodate these engines the Company occupied space on the main floor at the Show. The largest unit was Model 6DHM-1879, having a top rating of 248 hp. with 6½" bore and 8¾" stroke, and a cu. in. displacement of 1879. The engine is equipped with Twin Disc clutch and reverse gear. In fishing service this engine, with a 3:1 reduction gear, develops 171 hp. at 300 rpm. This Diesel is made in two other sizes recommended for fishing service; namely, 5¼ x 7 and 4¾ x 6½.

The smallest size Buda Diesel, namely, a Model 4DTM-212 having 4 cylinders, 3¾" bore, 5½" stroke and 212 cu. in. displacement, has been incorporated in a newly designed 10 KW generating set. The generator in this unit is directly coupled to the engine, giving the set flexibility, compactness and light weight.

All of the Buda Diesels are of the Lanova heavy duty type with 5 main bearings on 4 cylinder models, 7 on all 6 cylinder models.

Cummins Shows Supercharged Diesels

The Show featured Cummins Engine Company's newest development in a supercharged Diesel and marked the company's first showing of their complete line of supercharged Marine Diesels. The newest supercharged engine which was on display is the IMRS-600, a heavy-duty Diesel with a 7" bore, 10" stroke, displacement, 2309 cubic inches, developing 325 hp. at 1000 rpm. This represents a 75 hp. increase over the maximum 250 hp. of the standard unsupercharged Model L. Next is the AMRS-600, a small 4" bore, 5" stroke engine shown for the first time at the 1940 Show. This Diesel has a displacement of 377 cubic inches and develops 135 hp. at 2200 rpm. By supercharging, a one-third increase, or 35 horsepower, is gained over the horsepower delivered by the standard AMR-600 model.

The third supercharged Diesel on display was an improved

model of the first engine which Cummins supercharged for the Navy in 1938. This is the 6 cylinder, HMRS-600 which develops 200 hp. at 1800 rpm.

Another highlight of the exhibit was Cummins' new cooling system for all marine models. This featured a built-in fresh water cooling system complete with heat exchanger, expansion tank, sea-water pump and automatic full-flow thermostatic control. In addition to the improved cooling system, the new LMRS-600 supercharged Diesel will also be equipped with a lubricating oil cooler and a 125 gpm. built-in, clutch-controlled bilge pump. These heavy-duty engines can be equipped for air or electric starting or both.

The new full-flow type of thermostatic control permits a full flow of water through the engine at all times, the heat exchanger being automatically cut into the circuit when needed.

In addition to the supercharged engines, Cummins showed a standard 6 cylinder, AMR-600, developing 100 hp. at 2200 rpm. and the popular Model HMR-600 which develops 150 hp. at 1800 rpm.

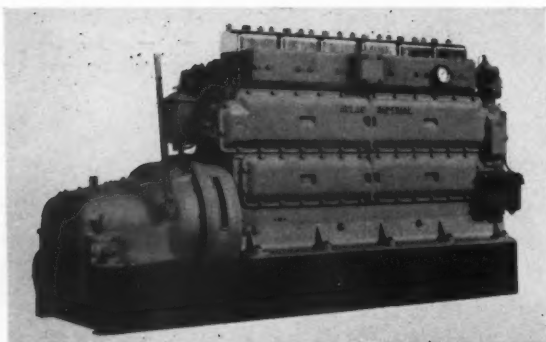
All these models of Cummins Diesels are equipped with the exclusive Cummins fuel and injection system. This system is unique in that it employs only one fuel metering pump which precisely measures each fuel charge for all cylinders. Through a distributor disc similar to the electrical rotor and distributor in the modern automobile, each fuel charge is routed to the proper cylinder where it is progressively injected during the power stroke of the piston.

Essie, The Mermaid, Makes Show Debut

Essie the Mermaid, eligible daughter of Mr. and Mrs. J. P. Neptune, made her formal debut at the Motor Boat Show this month. Essie greeted show visitors at the Essomarine exhibit, where the serious atmosphere of marine oils and greases was relieved by the humorous antics of queer creatures of the deep created by Doc Seuss.

Bewitching Essie, animated and lifelike, brought her pet whale along to the Esso display and invited the boldest of mariners for a ride on the back of the Seussian mammal. Those who braved the whaling excursion were rewarded with a photograph and a passport to "Happy Cruising".

All was not tomfoolery at the Essomarine exhibit and those boat owners and skippers who wanted to discuss the merits of marine lubricants found a group of experts in attendance to give advice and counsel on fuel and engine problems.

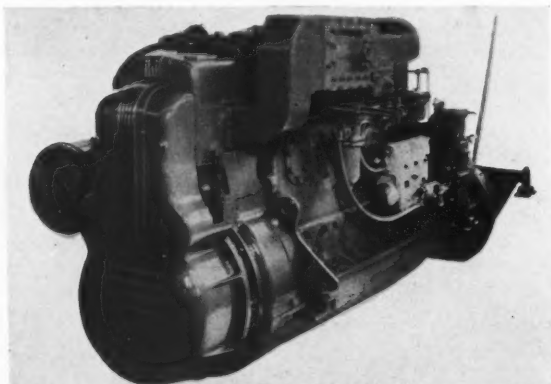


Atlas Imperial 6-cyl. Diesel developing 135 hp. at 900 rpm.

Atlas Propulsion and Auxiliary Units

The Atlas Imperial Diesel Engine Co. exhibited both an Atlas propulsion unit and an Atlas Lanova auxiliary generating set. The former, representing one of a new series of medium speed engines, was a 6-cylinder Diesel developing 135 hp. at 900 rpm. and having a $6\frac{1}{4}$ " bore and $8\frac{1}{4}$ " stroke. This model has a brake mean effective pressure of approximately 78 lbs. per square inch, and a piston speed of 1237 ft. per minute. It is equipped with individual Bosch fuel injection pumps and injectors as well as Twin Disc reverse and reduction gears, containing only five gears for the entire gear train. This model is also available in 45, 67, and 90 hp. sizes having 2, 3 and 4 cylinders respectively.

The auxiliary unit shown was a one-cylinder, 3 KW unit developing 5 hp. at 1800 rpm., with $3\frac{1}{8}$ " bore and $3\frac{3}{4}$ " stroke. This unit is also available in a 3-cylinder, 15 hp. size.



Superior Model SMRA-6, $4\frac{1}{2}$ " x $5\frac{3}{4}$ ", six cylinder, Super-charged Diesel.

Superior Shows Four Diesels

The National Supply Co., Superior Engine Division, displayed four Diesel engines. A feature of Superior's exhibit which was of particular interest to commercial boat owners was the Model MRD-4, $5\frac{1}{2}$ " x 7" four cylinder 90 hp. workboat engine. This engine is fully equipped with built-in fresh water cooling system, heavy duty reverse and reduction gear and a rugged hauling clutch for operating winders or drags of various types.

An example of the moderate speed, heavy duty type engine built by the Company was the Model IM Diesel with $8\frac{1}{2}$ " bore and $10\frac{1}{2}$ " stroke, which is offered in three sizes with 5, 6 and 8 cylinders, respectively developing 195, 235 and 310 hp. at 700 rpm. maximum.

This series of engines, like all other standard Superior Diesels, can be furnished for marine, stationary or generator set service.

Another engine shown was the Model MRD-6, $5\frac{1}{2}$ " x 7" six cylinder Diesel which develops 170 hp. at 1500 rpm. This engine is adapted to workboat service and can also be had in

an eight cylinder Model which develops 230 hp. at 1500 rpm. Thirty-three models of Superior Diesels are now available within a range of 25 to 950 hp.

Caterpillar Displays Full Line

The Caterpillar Tractor Co. more than doubled the size of its exhibit this year, displaying its full line of Marine Diesels.

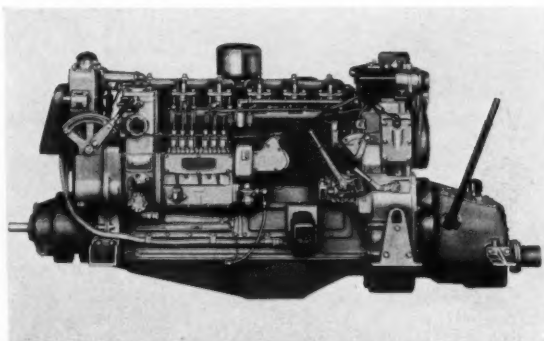
Two new engines, just recently announced to the trade, were exhibited for the first time as a feature of the display. These, the models D7700 and D8800, are both four-cylinder units, developing 60 and 70 hp. respectively. Both engines are complete power packages, ready for operation when but five connections have been made.

Five other models of Diesel Marine engines were displayed in the Caterpillar space. There were a V8 of 135 hp.; two sizes of 100 and 80 hp.; the two new fours, previously mentioned; a smaller six, rated at 55 hp.; and two small fours developing 35 and 25 hp.

The fuel system on all of these engines is of an exclusive design, and has an individual pump for each cylinder. Fuel injection valves are of the single orifice type. Both the pumps and the valves are factory set, and require no adjustment.

Of interest to visitors at the Show was a cutaway engine in the Caterpillar display. This working model, operated by an electric motor, showed in action all working parts of the modern compression ignition marine engine.

Caterpillar also showed a 20 KW, DC, Diesel Marine generator set, fully equipped and ready for installation.



Caterpillar D4600 Marine Diesel.

Mack "Mariner" Diesels

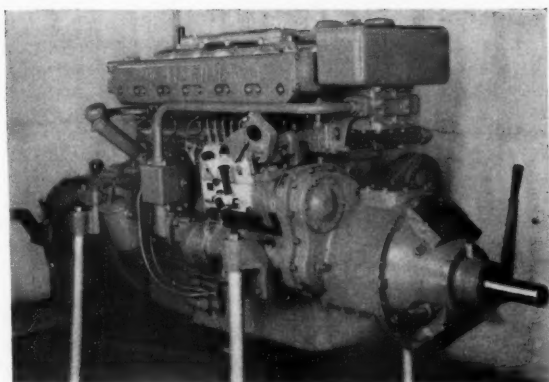
For 1941 the Mack Manufacturing Corp. is offering a wide series of Mack Mariner Diesel engines designed for fishing and workboat installation. Already established in the marine engine field with four Mariner engines of 405 and 510 cu. in. piston displacement designed for workboat service, Mack has added two new larger and more powerful Diesels to its line, both of 605 cu. in. piston displacement and designed for workboats.

The Mack Mariner engines operate on the full Diesel cycle employing the Lanova system of controlled combustion, and offer high specific output available for continuous duty. Moderate peak pressures, compression ratio and injection pressure all contribute to smooth operation and minimum bearing shock.

Smallest engines in the Mack line are the two 405 cu. in. engines of 4 " x $5\frac{3}{8}$ " bore and stroke developing 60-80 hp. for fishing and workboat service. Two larger engines of 519 cu. in. piston displacement are also included in the Mack line and these develop 80-100 hp. for workboat service. These two engines have $4\frac{3}{8}$ " x $5\frac{3}{4}$ " bore and stroke.

Newest and largest engines offered by Mack to the marine field are the 605 cu. in. Mack Mariners which have bore and stroke of $4\frac{5}{8}$ " x 6". These newest Mack engines have been designed to develop 100-125 hp. for workboat service.

At the Motor Boat Show visitors had an opportunity to view five of these Mack Mariner Diesels. Here Mack exhibited two 405 cu. in. engines, one a workboat model, and the other a yacht engine model exploded to show all its important features. Mack also featured its 519 cu. in. Mariner for yacht installation as well as two new 605 cu. in. engines, the latest Mack Mariner Diesels for workboat and yacht installation.



Type W 519 cu. in. Mack Mariner developing 100 hp. for workboats.

Palmer Features Diesel Line

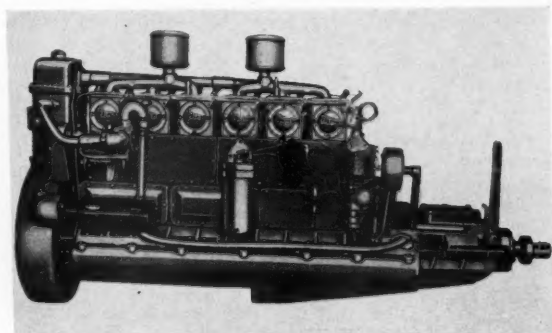
Palmer's Exhibit at the Motor Boat Show this year featured the RND line of Diesel engines in 1, 3, 4 and 6 cylinder models covering a range of horsepower from 9 to 60 hp.

A feature of this line of engines is their patented form of combustion chamber, which induces a terrific turbulence during the compression stroke so that the fuel is properly mixed and the combustion is complete.

The one cylinder job is mounted as a stationary engine and makes an ideal unit for driving auxiliary equipment such as generators, pumps and compressors. The 3, 4 and 6 cylinder models are primarily marine engines although they may be adapted for larger units of auxiliary power.

Each of the multi-cylinder engines is equipped with an electric starter. Provision, however, has been made for starting cold by hand. A pressure release is provided. A ratchet starting handle is permanently mounted on the aft end of the engine on the port side just over the clutch case. With the pressure release it is practical to spin the engine, gradually building up the centrifugal speed of the flywheel sufficient to start the engine by simply closing the pressure release.

In addition to the line of Diesel engines as described above, Palmer exhibited its regular line of gasoline engines 1, 2, 3, 4 and 6 cylinder models with and without reduction gears, covering a range of horsepowers from 2 to 150 hp.



Palmer Diesel RND 6 cylinder 60 hp. at 1000 rpm.

New Chrysler Diesel

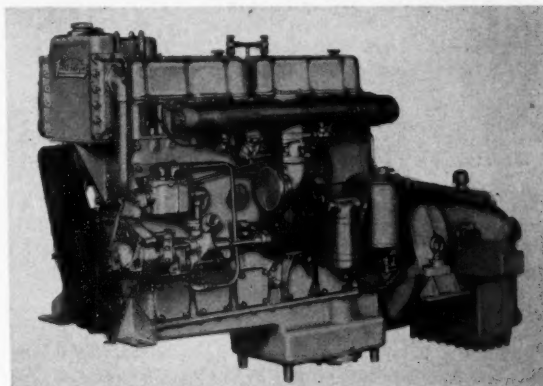
The main attraction at the Chrysler exhibit was the new Chrysler Diesel. The engine is rated 85 hp. at 2400 rpm., has a 3 3/4" bore, 5" stroke, and is fitted with fresh water cooling. It can be equipped with reduction gears in any of the following ratios: 4.5, 3.17, 2.5 and 2. Several Chrysler gasoline engines were also shown, including the 6-cylinder Ace models, rated 85 hp. at 3200 rpm. with straight drive, and 70 hp. at 700 rpm., with 3.46 reduction gear; also the 8-cylinder Royal model, 3 1/4 x 4 7/8, rated 120 hp. at 800 rpm., with 3.17 reduction gear; and the 6-cylinder Crown model with the new integral-built Chrysler Vee reduction drive, having a ratio of 2.05:1 and giving the engine a rating of 61 hp. at 800 rpm.

Hyde Propellers

The Hyde Windlass Co. display of Hyde propellers centered around an animated background which demonstrated the perfect balance of a Hyde by having one skipper balancing a wheel on a stick, while another skipper studied the Hyde catalog, which furnishes full data on the extensive Hyde line and complete distribution facilities.

Ferdinand Marine Glues

At the L. W. Ferdinand & Co. booth booklets describing the uses and applications of marine glues were distributed. Among the products displayed which are particularly adapted to fishing boat service were canvas cement, Jeffery's ship glue and Ferdico canvas patching adhesive.



Vigilant 152 hp. Waukesha-Hesselman marine oil engine—intake side—showing heat exchanger, sea water pump, oil cooler, magneto ignition, and Twin Disc reverse and reduction gear.

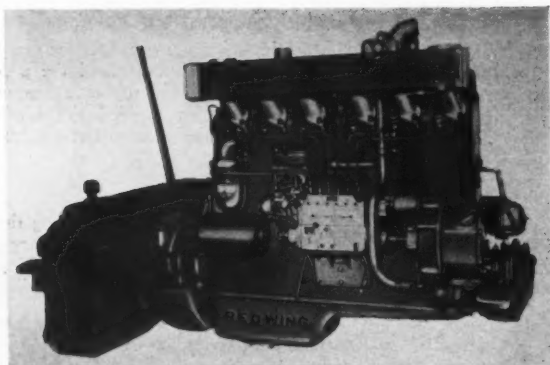
Waukesha New Model

The Waukesha Motor Co. showed two of their Waukesha-Hesselman marine oil engines. One of them is a new model which made its first bow to the public at this show. The Vigilant is a six-cylinder, 5 1/4" x 6" Hesselman type oil engine developing 152 hp. at 1800 rpm. and is complete with Twin Disc clutch and reverse gear—standard equipment—weighing under 3,000 pounds. The Hesselman engine is a solid injection Diesel oil burning engine which differs from the conventional self ignition Diesel engine in its positively timed electric spark ignition which is employed instead of high compression pressures used with the conventional compression ignition engine. The compression pressures in this engine are from 125-135 pounds with maximum explosion pressures on wide open throttle of 400-450 pounds. The engine can be and is on a par as to size and weight with conventional gasoline engines of similar horsepower ratings. Standard equipment on this engine includes American Bosch injection system, fresh water cooling system, water cooled manifold, oil coolers, instrument panel with Reliance tachometer, filters, and 12 volt electric starter and 375 watt generator. These, combined with a balanced heat exchanger and the Twin Disc 2:1 clutch and reverse gear form a complete unit.

The Defender model, a six-cylinder 6 1/4" x 6 1/2", 1197 cu. in. engine developing 188 hp. at 1600 rpm. was displayed in conjunction with the Dynamatic electric transmission, a marine drive furnished only with Waukesha-Hesselman oil engines. This unit was demonstrated in its smooth and positive action which permits instant reversal from full speed ahead to full speed astern by a simple control stand in the pilot's hands.

The Vigilant is designed for single or twin screw propulsion in small craft of all types. Large hand holes are provided for inspection of the seven main bearings and connecting rod bearings. Full pressure oiling is used throughout to every bearing, shaft and working part within the engine.

The Defender model is particularly suited to medium sized fishing boats, small tugs, and other small commercial craft. Its weight is under 4000 pounds.



Red Wing Hesselman Spark-Diesel 100-125 hp., 6 cylinder Model, one of the "Multi-Fuel" type engines.

Red Wing Shows New Size Engine

The Red Wing Motor Co. exhibit consisted of both gasoline and Spark-Diesel models.

In their line of Spark-Diesel marine engines a new size was announced. This is the 6-cylinder 100-125 hp. model with bore of $4\frac{1}{2}$ " and stroke of $5\frac{1}{2}$ ". 100 hp. is developed at 1500 rpm. for steady running with maximum of 125 hp. at 2000. It is available with or without reduction gear. This engine was designed to take the Twin Disc combined reverse and reduction gear.

This 100-125 hp. Hesselman model is of the "Multi-Fuel" type; that is, the engine can be purchased either as a gasoline motor or as a Spark-Diesel, and changed over from the one type to the other in about 20 minutes. As an oil engine it burns Diesel oils, ordinary furnace oils, distillates or kerosene with remarkable economy. This Multi-Fuel feature will also be available on some of the other Hesselman engine sizes.

The Red Wing gasoline engine line remains the same as in 1940, with the latest of these being the "Meteor" 7-18 hp. light weight 4-cylinder, weighing only 258 lbs. complete with electric starting system and built-in reverse.

Columbian Bronze Exhibit

Columbian Bronze Corporation exhibited its line of bronze and Monel propellers and a variety of marine accessories. Columbian has a new visible intake water strainer using "Lucite" tubing, an unbreakable plastic, that withstands wide changes in temperature. The new strainer removes the danger of flooding the boat from a broken strainer glass and yet permits the owner to check the condition of his water strainer quickly.

Columbian is also marketing a similar strainer with a solid metal tube as an integral part of the casting. Being cast in one piece, the danger of electrolytic action between the internal parts of the strainer is eliminated. The strainer is easily dismantled for cleaning. Columbian intake water strainers are available in either single or duplex units.

A new fibre vane rotary pump has been added to the Columbian pump line. The new pump has $1\frac{1}{4}$ " pipe connection and will deliver forty gallons a minute at 650 rpm. The pump is designed to handle cooling water in heat exchanger system, and its feature is the composition fibre vanes, which wear down slowly if suspended abrasives are passed through the pump, thus saving the metal case from the usual wear.

An addition to the Company's hydraulic remote control line, developed for use on high speed naval auxiliary craft, is a new hydraulic steering gear designed with a 1" piston rod in the rudder actuating cylinder. The power head has a reduction of nearly 30 to 1 allowing four turns of the wheel from hard over to hard over. This gear will handle boats up to 200' and is capable of delivering 30,000 lbs. inches torque or exerting 3,000 pounds on the end of a 10" tiller arm.

Columbian stock propellers now have machine ground pitch, and are also available with dynamic balance. At the present time there are eight different types of Columbian propeller design.

Colored Film at Pettit Booth

The feature of the Pettit Paint Company booth was the showing of a new colored film, which graphically demonstrated how to paint boats and how to properly use various types of marine finishes.

The company has developed several new products in the last year, including a new type of hard racing finish bronze. This is made in two classes, the first being highly toxic and a good anti-fouler, particularly for use in salt water, or on large vessels, not easily hauled for bottom inspection in fresh water. The second type is a hard smooth racing finish, producing a beautiful bottom with the appearance of burnished bronze, which is particularly adapted for use in fresh water.

Another new product, known as Winter-Kote, is for boat owners who follow the practice of giving the hull a coat of protective paint when it is hauled in in the Fall. The purpose of the application of Winter-Kote is to protect the bottom and keep the hull from drying out too badly and having the seams open up during the Winter.

The Pettit Log Book was again presented to all boat owners who registered at the booth.

Western Electric Radio Telephones

An electro-mechanical brain for radio equipped boats that can single out incoming telephone calls in less time than it takes to say "number please" was seen in a working exhibit of the Smith-Meeker Engineering Company.

The device, known as a selective calling mechanism, is an optional feature of the Western Electric marine radio telephone. With this mechanism, the telephone bell aboard a boat rings in response to a call from a shore operator, thus eliminating the necessity for prearranged schedules or for monitoring all calls with a loudspeaker.

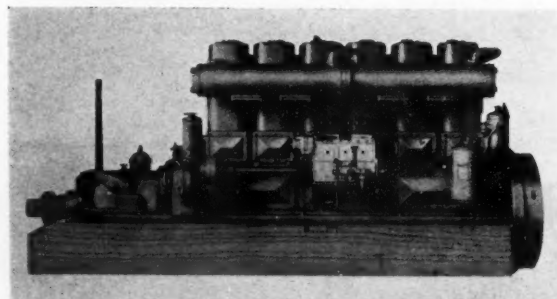
In the Smith-Meeker exhibit, Western Electric radio telephones for every size of boat and variety of service were shown.

One of these, the 100-watt equipment, brings new convenience to trawlers and other commercial craft. This instrument, known as the type 224B, incorporates the selective calling feature. It has ten channels available in the transmitter and receiver, nine of which may be utilized for ship-to-shore communication and the tenth reserved for ship-to-ship or coast guard.

Also shown was the radio compass, designed to operate in conjunction with all Western Electric radio telephones. This unit, a model 50A, covers frequencies between 230 and 350 kc which include all of the marine radio beacons. The instrument consists essentially of a specially shielded loop antenna, mounted on a tuned radio frequency amplifier, and a frequency converter. It derives all power from the radio telephone equipment with which it is used. It measures 10" wide, $7\frac{1}{2}$ " deep, $22\frac{1}{4}$ " high including the loop, and weighs approximately 17 lbs.

Lathrop Gasoline and Diesel

The Lathrop Engine Co. exhibit was composed of six different models, including the type D-50 Lathrop Diesel having 4 cylinders, with $5\frac{1}{2}$ x 7 bore and stroke, and developing 50 hp. at 800 rpm. The 4-cycle gasoline engines included the 115 hp. Mystic model, 75 hp. Engineer's model, 40 hp. Standard model and 107 hp. "LH" model. Also shown was a 1-cylinder, 2-cycle, 4 hp. gasoline engine.



Type D80, 6-cylinder, 80 hp., 4 cycle Lathrop Marine Diesel.

Michigan Wheel

Michigan Wheel Corp. demonstrated a working model of its Helical planing machine, showing the actual machining of the pitch of a propeller blade. Equipment used in the pitch-block method of boring and the repairing and adjustment of propellers was included, together with a complete line of propellers.

Grady Shows Fisher Equipment

Grady Instrument Co. featured the Fisher line of navigating equipment, including the latest model Fisher Standard Pilot direction finder, which is equipped with a bearing meter; the Fisher Junior Radio Pilot and the Fisher radio telephone. Sound-view marine radio receivers were also displayed.

Reiner Auxiliary Combination

John Reiner & Co., Inc., exhibited their combination Diesel marine auxiliary unit consisting of a Stover 4-cycle full Diesel engine driving a Quincy two-stage air compressor, a Star marine type, ball bearing generator and a Viking rotary bilge, general service and fire pump. These units are individually driven and operated by means of separate Twin Disc clutches. The Reiner line of auxiliaries consists of 20 different models and combinations, and are designed to meet space limitations without sacrificing accessibility.

Twin Disc

Twin Disc Clutch Co. featured a 125 hp. reverse gear unit as well as a front-end power take-off and reduction gear for hoisting.

Cape Cod Loop Extension

Cape Cod Instrument Co. introduced an improved model of the Cape Cod Navigator direction finder. The new set has broadcast and marinephone bands in addition to the beacon band. It has a new built-in beat frequency oscillator circuit which makes it unnecessary for a sending station to be talking in order to give a bearing. The unit has a special mounting designed to absorb any engine shock. A special feature of the Navigator is the mounting of a compass in the loop, thus making direct reading possible.

The Company has brought out a specially designed loop extension for use atop pilot houses on boats having steel hulls or steel houses. The loop bearing has two ball thrust bearings and a substantial loop lock.

Kelvin-White Navigating Line

The Kelvin-White Co. booth contained a complete line of navigating instruments including Kelvin-White spherical compasses, Photo-Electric Pilot automatic steering equipment, Seaphone marine telephones, and Bludworth and Cape Cod direction finders.

Joe's Gears

Joe's reverse and reduction gears were featured at the exhibit of Snow & Petrelli Mfg. Co., with a complete unit on display.

Higgins Marine Pump

The highlight of the Higgins Industries booth was the new Higgins marine pump. This unit, which is no larger than a pair of clasped hands, pumps 175 gallons per minute and is driven by a 1 hp., 2,000 rpm. motor. The pump operates on an improved principle of the Archimedes screw and requires no priming. The pump is suitable for bilge, fire and deck service and in connection with fresh water cooling systems. Also shown was the Higgins radiophone transmitter and radio, which is available in various sizes from 10 to 175 watts.

Plymouth Rope

Capt. George Monsell, famous sailing master, was in attendance at the Plymouth Cordage Co. booth. On display were coils of various sizes of rope, a section of the largest piece of rope ever made in the Plymouth rope walk and different types of tackle.

Texaco Ports

The Texaco exhibit featured pictures of Texaco mail ports and waterfront outlets; also a display of the complete Texaco line of oils and greases. A special tie-in with this exhibit was the broadcast of the Fred Allen Texaco Star Theater, which was attended by many Motor Boat Show participants.

Gulf Racers

At the booth of the Gulf Oil Corp., slides were shown of racing activities covering the principal speed boat regattas of 1940. Photographs of racers who used Gulf products were shown in the Gulf Racing Hall of Fame. The new Gulf Info maps for Southern waters were distributed, and these will be supplemented shortly by similar maps for the North. New harbor booklets are also to be issued soon. A touch of humor was given the booth by a laughing Gulf skipper who supposedly chuckled at troubled boatmen who were without Gulf.

New Woolsey Synthetic Finishes

C. A. Woolsey Paint & Color Co. exhibited its lines of Woolsey and New Jersey marine finishes which carried the first showing of new labels. The Company has recently added two new synthetic finishes especially prepared for severe conditions, known as Woolsey Cawlux and New Jersey Sealux. A contest was held for visitors to guess the number of barnacles on a panel.

Goodrich Bearings

Goodrich cutless rubber propeller shaft bearings were displayed by Lucian Q. Moffitt, Inc. Special testing machinery demonstrated how these bearings reduce noise, vibrations and sand abrasion.

Photo-Electric Pilot Unit

The Photo-Electric Pilot unit, shown by Smith-Meeker Engineering Company, is designed to automatically pilot boats up to 150 feet long, on a split-degree course. It operates from the ship's battery and connects to the steering gear. The larger Model 50 comprises three main units: the steering motor with built-in clutch, compass unit and the electrical control.

The steering motor is connected to the steering system by means of a sprocket and roller chain. All electrical and mechanical connections are simplified by the use of flexible cables. A remote control feature is available which permits changing the boat's course by plugging in a hand-switch at any desired place on the boat.

Noskid Paint

International Paint Co. showed its Interlux paint line as well as its noskid deck paint for which there was used a dramatized display showing a deck hand rescuing a feminine passenger who had slipped overboard.

U. S. Motors

The United States Motors Corp. exhibited 3 KW, 5 KW and 10 KW Diesel generator sets as well as 1 and 2 cylinder slow speed, heavy duty propulsion engines, and a 2 cylinder medium duty unit.

Eco Gearless Pumps

Eco Engineering Co. featured Eco gearless pumps which are made entirely of bronze and have a removable impeller which allows gritty particles to pass without harm to the pump. The pumps are furnished with special bearings which require only water lubrication.

Gray Diesels in Five Sizes

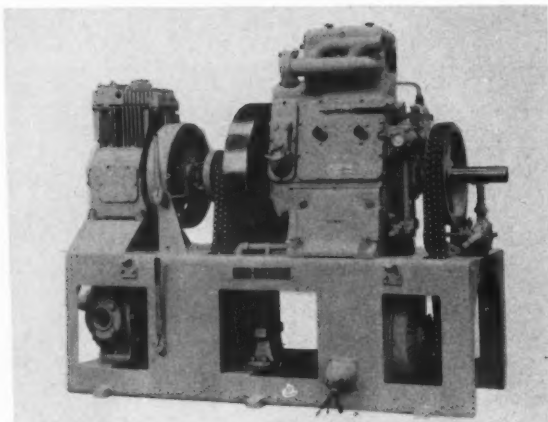
The Gray line for 1941 which was exhibited at the Show includes 5 Marine Diesels, from 25 to 165 hp., and 27 gasoline marine engines, of which 12 are medium and heavy-duty models, 16 to 124 hp., suitable for use in work boats.

The gasoline engines which Gray builds for fish boat service have tin-plated iron pistons for operating speeds to 2400 rpm., and all are equipped with Gray's Thermostet temperature control system. They are available with built-in power take-off.

Five sizes of the Gray Diesel 1 to 6 cylinder, are in production, based upon the engine developed and built by General Motors, adapted and equipped for marine use by Gray. All have bore of 4 1/4 inches and stroke of 3 inches, basic cylinder size 71 cubic inches, and use interchangeable parts. Fresh water cooling is standard on all models.

Monel Products

International Nickel Co. featured Monel as the "seagoin' metal", and exhibited various Monel products including shafts, galley equipment, nails, radio antennae and tanks.



Lister-Blackstone Type 18/2 combination auxiliary unit: 10 KW, 44 c.f.m., 250 g.p.m.

Lister-Blackstone Auxiliaries

The Lister-Blackstone exhibit featured two auxiliary units. One of these was a combination unit comprising a 10 KW generator, 44 c.f.m. compressor and 250 g.p.m. pump, driven by a 2-cylinder, 18 hp. Lister-Blackstone Diesel. The other unit was a compact, self-contained 6 hp., 2½ KW generator set designed to occupy a minimum of space.

Mansley Radio Telephone

Ray Jefferson, Inc. demonstrated the Mansley marine radio telephone. The Model 14 set has 4 channels without tuning dials or adjustments, has complete crystal control of both transmitter and receiver, and is furnished for operation on 6 or 12 volt batteries. It is completely self-contained, except for the telephone hand set which has a "press-to-talk" button in the handle.

Oberdorfer Pump

M. L. Oberdorfer Brass Co. exhibited what is said to be the first clutch-driven bilge pump. It is a bronze gear pump with a ¾" intake and outlet. It can be installed on any power take-off or used with a V-belt pulley. It can be operated in conjunction with the propulsion engine or the power plant. For deck pump use, two 3-way valves with double intake and outlet can be attached. By a shift of the ball control handle the split pulley can be closed to drive the pump or opened for idling.

New York Marine Radio

New York Marine Radio Co. featured three models of radio telephones suitable for use with the following electrical systems: 6 and 12 volts DC, 32 and 110 volts DC and 110 volts AC.

Exide Floating System

Electric Storage Battery Co. demonstrated a working display of the Exide floating battery system, complete with switchboard, which maintains constant voltage across the bus. The system contained 60 cells of 120 volt and 117 ampere hours. There was also a revolving display of all sizes of Exide batteries from the smallest capacities to those rated at 1136 ampere hours.

Hallicrafters Telephones

Hallicrafters radio telephones were exhibited by Haynes-Griffin. One was the Flotilla model with 12 watt output, which can be operated on 3 marine frequencies: ship-to-shore, ship-to-ship and coast guard. The receiver is manually tuned and covers the standard broadcast band on range No. 1, and the marine channels on range No. 2. The other set shown was a Cruising model with 25 watt output. It has 5 marine frequencies, a separate power supply and quartz crystal controlled transmitter and receiver. There is also made a Sea-going model with 50 watt output and 10 crystal controlled transmitting and receiving channels.

New Jefferson-Travis Radio Receiver

Jefferson-Travis Radio Mfg. Corp. announced their new Tri-Add Marine Radio Receiver and Direction Finder.

The basic unit of this new equipment consists of a compact, three band marine type radio receiver designed to operate as such alone; also to operate as a direction finder by the addition of a plug-in loop antenna with compass scale.

The unique flexibility of these units now makes available a receiver which can be purchased initially and used alone; and, at the owner's option, the direction finder assembly can be purchased with it initially or it can be added later.

Necessary circuits are built into the receiver to make it operative as a direction finder, by application of the loop antenna and compass scale, as an entertainment broadcast receiver, and as a marine telephone standby receiver.

The balance of the display at the Jefferson-Travis booth consisted of six standard model radiotelephones.

Smith Paints

Edward Smith & Co. demonstrated color combinations for their Cup Defender finishes. Also shown were Smith Esco red anti-fouling bottom paint and Smith commercial finishes.

Hill Diesel

Hill Diesel Engine Co. showed its Model R, 3½ x 5½ Diesel, which is available with interchangeable parts in 2, 4 and 6 cylinder models developing 6 to 75 hp. Also exhibited was a 7½ KW, 17 hp. 2-cylinder Hill Diesel auxiliary unit.

Bludworth Direction Finder

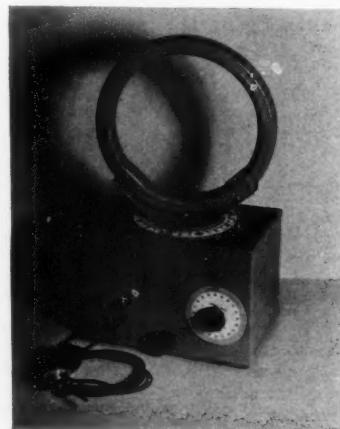
The theme of the Bludworth, Inc. exhibit was radio beacon navigation. A complete line of direction finder equipment for use on boats from the smallest to largest sizes, was exhibited.

Universal Display

Universal Motor Company offered ten complete series of Universal marine engines for 1941 at the Show in addition to two special racing models, making a total of 76 separate models in all. First on the list comes the single-cylinder 8 hp. Fisherman series; then the new and improved Blue Jacket Twin models; the 25 hp. Utility Four series; the new and improved 40 hp. Flexifour series; the 50 hp. Super-four series; the 60 hp. All American Six series; the 90 hp. Cruiser Six series; the 125 hp., Cruiser Eight series; the 110 hp. Sea Lion Six series; and the 141 hp. Sea Lion Eight series. All models except the Blue Jacket Twin series are available with built-in silent herringbone reduction gears as well as in direct drive.

New Ansley Direction Finder

The Ansley Radio Corporation introduced a new radio direction finder, especially designed for salt-water use. Its five tubes and seven tuned circuits provide a range from 275 to 325 kilocycles, covering all marine radio beacon stations. The Ansley Direction Finder requires no connection of any sort, and its new special tubes make its batteries last an entire season. Its totally shielded loop antenna is said to give sharp readings and provide extreme sensitivity and selectivity with one degree accuracy. The instrument carries a seven-inch compass card.



New Ansley Radio Direction Finder which has five tubes and seven tuned circuits.

Maryland Seafood Association Appoints Legislative Committee

KEENLY interested in proposed legislation which will affect their industry, to be introduced at the next session of the Maryland Legislature, members of the Crisfield Seafood Association, met on December 17 and discussed some of the questions involved.

Disapproval of the tentative plan to place all conservation under one head was voiced most generally. The members of the Association feel that their problems are strictly commercial, and that the commercial end of conservation should remain separated from the rest of the proposed new conservation program.

The Association appointed the following Legislative Committee to cooperate with State Senator L. Elwood Dize in studying legislation that may be presented to the Legislature, and to make recommendations for any new legislation the committee may feel is needed:

A. Earl Dize, Charles M. Woolston, Sr., Murray Ward, Isaac H. Tawes, J. C. W. Tawes, Richard Christy, Carroll Dryden, Noah Ward, Morris Milbourne, Arlie G. Sterling, Hall N. Miles, Nelson R. Coulbourn, all of Crisfield, and Robert L. Webster, Deals Island and W. M. Evans, Smith's Island.

A committee appointed by Governor O'Connor of Maryland to prepare recommendations for the State legislature that meets in January, in Annapolis, for the seafood industry, was as follows: J. T. Handy of Crisfield; Ellsworth Leary of Rock Hall; Dr. R. V. Truitt, director of the Chesapeake Biological Laboratory; and Herman Woodfield, of Galesville.

Oystermen's Assoc. Formed

The Maryland Oystermen's Association was incorporated in December. The purpose of the organization is to promote general interest in the oyster industry in the State and its natural oyster bars, sponsor methods to increase the yield and quality of oysters from the Chesapeake bay and its tributaries, and to do all things in connection therewith, subject to the laws of the State, which might benefit those engaged in the Maryland oyster industry.

Incorporators of the Association are Dewey Anderson and Hobson Burton of Deals Island and Oliver O. Webster of Dames Quarter. Resident Agent, Noah A. Hillman, Church Circle, Annapolis, Md.

Oystering Bringing Excellent Results

The watermen, dredgers, and tongers have had the best season so far this year that they have had in twenty years. Some dredgers, whose crew work on a share, drew \$45 a week during December. Tongers, who worked in Pocomoke Sound, caught from forty to one hundred bushels of oysters a day and sold them for fifty to seventy cents a bushel. Some dredgers caught from two hundred to four hundred bushels a day. The packers had a better grade of oysters and the shuckers could get more gallons, with better money than in several years.

Menhaden Studies Reveal New Source of Vitamin D

New source of vitamin D, famed in treatment of rickets, has been discovered by two technical investigators at the College Park laboratories of the Fish and Wildlife Service, United State Department of the Interior.

Experimenting with residual oils obtained by solvent extractions of commercial menhaden fish meal, the co-workers—W. H. Baldwin and H. F. Kraybill—have found that the crude oil of this abundant species yielded about 0.3 per cent of cholesterol.

Within the cholesterol is a further impurity, ergosterol. This latter, according to the investigators, might be developed into a commercial product for irradiation by ultra-violet rays, or other means of activation, thereby increasing its vitamin D potentialities.

Virginia Studying Possibilities of Ribbed Mussel Industry

THE Virginia Fisheries Laboratory at Yorktown, supported jointly by the Commission of Fisheries and the College of William and Mary, launched a conservation study of the ribbed mussel, the State's newest fishery industry, Jan. 1.

The mussel, which until recently had no value, was discovered to be a source for certain chemicals and last summer large quantities were marketed by Virginia watermen.

The duPont company of Wilmington, Del., has contributed funds for the survey. Dr. Curtis Newcombe, Director of the Yorktown Laboratory, believes that the mussel crop ultimately might assume important proportions, especially on the Eastern Shore.

The entire Tidewater area as well as the ocean side of the Eastern Shore will be included in the survey to determine the most ideal habitat of the shellfish and the best means of protecting their reproduction.

Commissioner of Fisheries G. Walter Mapp has assigned the boat "Agnes Hope" to the Yorktown Laboratory for the survey. It was expected that at least a year would be required and that the cost would be in the neighborhood of \$7,000.

Because the ribbed mussel can be taken at any season, the new industry should prove a complement to oyster tonging in the cold winter months, Dr. Newcombe said.

O'Connor Fights Oyster Embargo

Maryland's Governor Herbert R. O'Connor has appealed to the Governors of other oyster-producing States to act with him in seeking a modification of the war-time embargo on oysters which has been imposed by the Canadian government.

The Governor acted after several Eastern Shore packers had reported receiving cancellations from Canadian customers, to whom a large percentage of Maryland's oyster output normally goes.

Oysters and certain other seafoods were among "luxury imports" which Canada banned recently from the United States and other nations outside the British Empire in a move to save foreign exchange for essential war materials.

Meanwhile, Denmark is introducing the mussel as the national dish replacing the oyster.

The severe winter of 1939-40 spelled death for most oysters found off the Danish coast. Hundreds of tons of mussels, however, were fished this year. Thus a campaign has been launched to make mussels a common dish in every home. The argument is that mussels are rich in vitamins and cost the Danes only about 2½ cents a pound.

Begin Boundary Division

The jurisdiction of the State's two fisheries commissions was agreed upon for all sections of Tidewater except Fairfax and Prince William counties at a meeting of representatives of the two agencies last month at the office of the Commission of Fisheries in Newport News.

Representing this agency, which regulates fisheries in the salt-water areas of the State, were Commissioner G. Walter Mapp and Members George Layman, Gilbert Diggs, Junius West and Charles Stuart. The Game and Inland Fisheries Commission, which regulates sport fishing in the fresh-water areas of the State, was represented by Chairman Carl H. Nolting and Judge W. S. Snow of Alexandria.

Adjustment of the lines in Fairfax and Prince William, the most disputed areas of the State, will be undertaken at a meeting between Mapp and Stuart and representatives of the Game Commission on Saturday, Dec. 28, at Quantico.

The tributaries still in dispute are Dogue Creek, Gunston's Cove, Occoquan Creek, and Belmont Bay adjacent to the Potomac River.

The Commissioner of Fisheries has jurisdiction over all tidal waters in the State under existing statutes, and the Game Commission's authority begins at that point. Under State law these jurisdictions are subject to semi-annual review and renewal.

North Carolina May Establish Demonstration Oyster Farms

ESTABLISHMENT of two or more demonstration oyster farms in North Carolina, as an aid to the promotion of oyster culture, may result from recent conferences in Raleigh with officials of the North Carolina Department of Conservation and Development and Fish and Wildlife Service.

At the Fall meeting of the Conservation Board, complete approval was given to the plan submitted by the Service's Beaufort laboratory for the development of two or more oyster farms and a resolution passed requesting the State Legislature for a special grant of \$10,000 to carry on this program. In connection with this program, a general survey was made of the available bottom in the North River region where at least 1,000 acres of ground suitable for oyster cultivation were found adjacent to the site of the experimental oyster farm.

In the vicinity of the Beaufort laboratory a small but typical area of salt marsh land has been enclosed with several 10-inch dikes in parallel formation, in order to hold water thereon long enough to permit satisfactory growth of seed oysters. Arrangements have been made to supply this experimental marsh area with salt water by means of a small windmill and lift pump.

By this plan it is hoped to develop a practical method whereby oysters can be grown at approximately high water level under protected and controlled conditions, and thus demonstrate a means of utilizing the extensive salt marsh areas of the South Atlantic region.

Oystermen Re-elect O. A. Bloxom

O. A. Bloxom of Battery Park was re-elected president of the Virginia Oystermen's Protective Association in the 26th annual meeting of the group held late in December at Newport News. J. C. Curtis was chosen vice-president; E. T. Freeman, secretary; H. T. Messick, treasurer; W. F. Lawson, chaplain.

The association passed a resolution opposing a recent recommendation by the oyster packers of Virginia to place a three-cent tax on Virginia oysters to produce revenue for advertising. "It is not that the association opposes advertising oysters, but Virginia should take this sum from the general fund as she does all other advertising appropriations," the resolution read.

The oystermen in an alternate proposal suggested that all oyster-producing States join and share the cost of advertising oysters, "rather than leave the burden of such advertising to Virginia and Maryland," their resolution said.

In another resolution the watermen asked the Virginia Commission of Fisheries to divide equally by geographical zones the gallon or bushel tax collected by the State for rehabilitation in the various districts, so that each section would receive some rehabilitation.

Fishermen to Develop Dogfish Industry

Alert Virginia fishermen will begin now to consider utilization of the Chesapeake Bay Summer dogfish harvest as a source of vitamin A oil. Fishermen elsewhere are receiving 6 cents per pound for dogfish livers.



Capt. Ed. Sundin aboard the shrimp trawler "Starboard Rock", owned by Arthur Rock of Berwick, La. She is powered with a 60 hp. Diesel engine turning a 32x19 Columbian propeller.



Stathis Klonaris, boatbuilder of Morgan City, La., standing beside the new 46 ft. trawler "Andrews" which he recently completed for Capt. S. Andrews of Morgan City. She is powered with a 100 hp. Superior Diesel. Mr. Klonaris has four 56 ft. trawlers under construction in his enlarged plant.

St. Augustine Yards Building Several New Boats

By Leonard Willey

THE majority of the shrimping fleet are still fishing out of Louisiana waters, and the three local boat-building yards are turning out boats as fast as they can for Louisiana ports. John Hardee and Felice Golino have two new boats each. One new boat is for Capt. Tony Ramos, one for V. Santos, and Jack Acebal's new boat, named *Cardonga*, is equipped with a 70 horse-power Superior Diesel engine and driving a Hathaway winch through silent chains. A new feature in this boat is a cypress water tank built directly into the boat. Both of Felice Golino's boats have Enterprise Diesel engines which are giving excellent service.

Recently completed at the New Augustine Boat Works is the *Neighbor* for Captain Blanchard of Jacksonville. She is 65 feet long, has a Fairbanks-Morse engine and the hoist is driven through a Hathaway clutch. This boat is shrimping out of St. Augustine.

Boats Driven Ashore

In the recent storm three shrimp boats and a yacht were driven ashore in this vicinity. The *Angela R.* and the *Resoria*, both owned by Captain Recoupero, were on the way from Brunswick, Georgia to St. Augustine. In thick weather, both boats went ashore near Ponte Vedra Beach. The *Retoria* was a total loss, but the *Angela R.* was pulled off by the Coast Guard boat without serious damage.

The *Faithful*, Capt. Tommie Fazio, grounded high on the beach, near the inlet, on the morning of Dec. 20. At high tide on Dec. 26 the Coast Guard *Tallapoosa* from Savannah, standing off the beach about 2,000 ft. and with a 3-inch hauser twice around the *Faithful* pulled her off the beach and through the breakers into deep water. The *Faithful*, built in 1939, is 48 ft. long and powered with a Caterpillar Diesel engine. She was towed to the railway by the *Lussin*, which also has a Caterpillar engine.

Sponge Institute Closes Successful Year

AT the annual meeting of The Sponge Institute in New York on December 6th, reports revealed that 1940 sales of sponge and chamois were greater than in 1939 and that the industry experienced a very good year. The Institute has been successful in having express rates from Florida production points to important consuming centers reduced. Officers for 1941 are: President: Milton Cohn, Pres., Gulf & West Indies Co., Inc., New York City; Vice-President: L. T. Arnold, Sec'y-Treas., S. M. Arnold, Inc., St. Louis, Mo.; Treasurer: David Bloch, Pres. Atlantic Sponge & Chamois Corp., New York City; Executive Secretary: Lewis Radcliffe, Washington, D. C.

Gloucester Has Biggest Year For Redfish on Record

GLoucester had its greatest redfish year on record this past year, being estimated that close to \$2,000,000 was added to the city's wealth because of the 62,000,000 pounds of redfish landed in 740 trips since last January 1,* a sizeable increase of 13,000,000 pounds over 1939 and an increase in revenue of some \$700,000.

Gloucester dragger also experienced a profitable year, one of their best in history, with the highline dragger being the schooner *Edith L. Boudreau*, Capt. J. Alphonse Boudreau, stocking \$85,800, with a share per man of \$4,320. Captain Boudreau, who is only 40 years of age, has been a skipper for the past 14 years, having such craft as the *Gladys Cremer*, *Desire*, and *Marie and Winifred*.

Other top-notchers include the *Elvira Gasper*, Capt. Joaquim Gasper; *Corinthian*, Capt. Jerome Noble; *Evalina M. Goulart*, Capt. Manuel Goulart; *Olivia Brown*, Capt. Frank Brown; and the *Magellan*, Capt. Joe Rose.

These high-line boats did not catch redfish alone, but went groundfishing during the Boston beam trawler strike, to take advantage of the high prices at that time.

The biggest single month for redfish was June, when 9,082,000 pounds were landed, making this month the greatest in redfish history. The largest single week was that of June 3 to 8 when 41 trips were landed with a total of 2,790,000 pounds, while the largest single day was on Wednesday, October 2, when 16 trips landed 1,250,000 pounds, adding \$30,000 to the city's wealth for that day alone.

New Firm—Progressive Fillet Co.

The latest addition to the Gloucester waterfront units is the Progressive Fillet Co. at the Fort, an auxiliary of the Progressive Fish Co., managed by Capt. Leo Linquata.

The new plant, modern in every respect, will have Scotty Craig as manager. He has been in the fish business for years, and more recently has been at the new fish pier.

Captain Linquata states that he plans to have a force of 20 to 25 men at work and will handle all types of groundfish, including redfish. They expect to open the middle of this month.

"Gov. Saltonstall" Sold to Navy

The Gloucester dragger *Gov. Saltonstall*, built at Essex last Spring, has been purchased by the U. S. Navy to be used as a mine sweeper.

The boat, owned by Capt. Tom Benham and skippered by his son, Capt. Gerald Benham, was built by Lyman James, with J. P. Story, 80-year-old shipwright, in charge, and was launched on April 20.

Dragger Crews to Stay Ashore One Trip in Nine

Gloucester dragger fishermen agreed on Jan. 6 to a proposal that each man take a vacation for one trip in nine so that one of the fishermen "put on the beach" by the sale of draggers to the United States Navy could get back to regular employment again.

The proposal was made at a special meeting of the Atlantic Fishermen's union when Business Agent Austin J. Powers addressed the 65 fishermen present.

Agent Powers said that the dragger fishermen should be willing to sacrifice one trip in nine, or five trips a year, since the sales of 14 beam trawlers and nine draggers have caused an increase in fish prices in the Boston market, and a consequent boost in the shares for each trip.

Powers reminded the group that two Gloucester draggers, the *Rio Douro* and the *Gov. Saltonstall* had been sold to the Navy, and that although the *Rio Douro* crew had transferred to the dragger *Skilgolee* with their skipper, Capt. Albino Pereira, the crew of the other dragger along with other local fishermen were left without sites, so that in all some 25 Gloucester fishermen were "on the beach."

Maine Attempting to Establish Salmon Fishery

SEA and Shore Fisheries Commissioner Arthur R. Greenleaf said that in what would be the first real attempt to establish a salt water Chinook salmon fishery along the Maine coast, his department would co-operate in propagation activity and that the Department of Inland Fisheries and Game would also be asked to participate. In line with the program the Bureau is bringing a large number of Chinook eggs from the Pacific coast to be released in Maine streams which are found suitable for them.

Greenleaf said that the action was prompted by the discovery of dozens of large Chinooks at the mouth of the Pemaquid River last fall. The fish trying to get up the stream to spawn had, it is believed, escaped from Biscay Pond when the screens went out during the 1936 floods.

With the three organizations working in close cooperation it is felt that some worthwhile results can be obtained. The fact that the Chinooks found at Pemaquid weighed as much as 42 pounds is good evidence that they find the Maine coast waters suitable for rapid and healthy growth.

Clam Industry Legislation

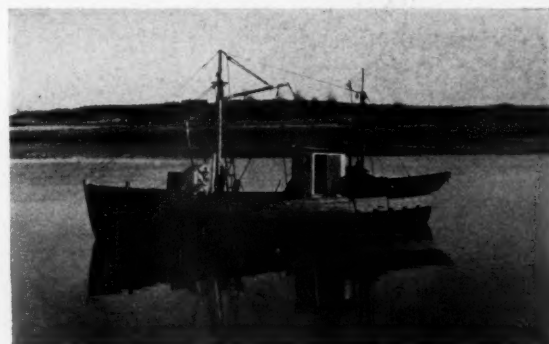
The Maine Fisheries Association interested in improvement of the clam industry through legislation on Jan. 10 submitted to Sea and Shore Fisheries Commissioner Arthur R. Greenleaf a program which it plans to sponsor at the present session of legislature. State control of the clam flats, an extensive propagation project and stricter licensing regulations for buyers were included in the proposals which secretary James Herrick of Orr's Island said had been favored by the Association's clam committee.

According to Herrick the committee believes that the state should have well defined control of the clam flats and that many of the 50 or more local and private laws are unnecessary and unfair. A propagation program in which 150 acres would be put under cultivation and financed jointly by the state and the various towns is favored and the Association would like to see all clam buyers licensed and bonded to protect the diggers from crooked operators. The bond would be set at \$5000 and resident buyers would pay a fee of \$150 and non-residents \$300.

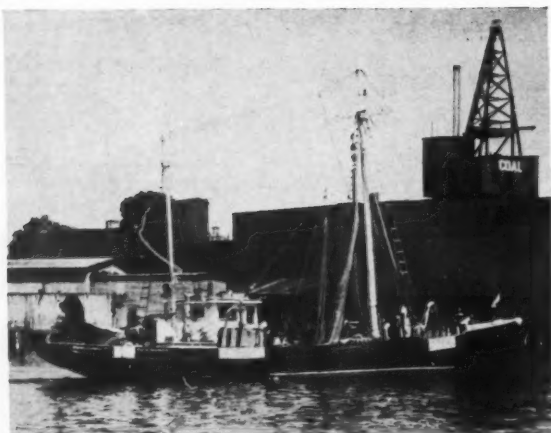
Advertising Crab Meat

State of Maine crab meat is being advertised by Maine Development Commission, featuring Ralph K. Barter's Deer Isle Brand and the brand of Burnham & Morrill Co. that is being packed for them by Barter. The advertising, prepared by Brooke, Smith, French & Dorrance of New York, will be confined for the present to New England, the largest single market area now for Japanese and Russian crab meat.

Advertising is scheduled for newspapers, trade papers and New England sectional magazines and radio.



The "Ann and Marie", owned by Alonzo Carter of Gloucester, powered with a 4-cylinder, 2-cycle, 6 $\frac{1}{8}$ x 8 $\frac{3}{8}$ Wolverine marine Diesel engine.



Richard J. Nunan of Portland at Gloucester. She is owned by Lawrence Scola of Boston and commanded by Capt. Matthew Mocer. Powered with a 110 hp. Cooper-Bessemer Diesel.

Lobstermen Hold Important Meeting

Sixty lobster fishermen, smackmen, and dealers, gathered at Rockland on Jan. 10 when a very enthusiastic meeting was held by the Maine Fisheries' Association.

The meeting was called to order by H. W. Look of Rockland, who immediately moved for the nomination of Rev. Mr. Herrick as chairman.

At the close of the meeting Mr. Look was appointed secretary of the Rockland Branch of the Maine Fisheries' Association with authority to call a meeting of the Association.

The vote in favor of the Federal Interstate Commerce Law was unanimous; also the vote in favor of putting clam regulations in the hands of the Commissioner of the Sea and Shore Fisheries with the provision that any town may have the right to petition for local legislation.

Lobster Industry Problems Aired

Troubles confronting the lobster industry got a real airing in Boston on December 13 and 14 when a number of important issues including Canadian imports, uniform sizes, marketing, propagation and conservation were discussed by the North Atlantic Lobster Research Committee.

Commissioner Greenleaf participated in the discussions, accompanied by Dick Reed of the Maine Development Commission, who reported on an on-the-scene survey of the Canadian situation which he made some time ago.



The New Bedford scallop dragger "Malvina B", of which Capt. Jens Isaksen is skipper and Magnus Isaksen, engineer. Equipped with a 5-cylinder, 150 hp. Fairbanks-Morse Diesel engine, Hyde propeller, Kinney clutch, Hathaway winch and Kidde-Lux fire extinguisher.

Boston Pier Landings for Dec.

(Hailing fares. Figure after name indicates number of trips)

Adventure (4)	227,000	Marjorie Parker (3)	49,300
Adventure II (3)	98,200	Mary Grace (2)	72,000
Alice J. Hathaway (1)	54,000	Mary E. O'Hara (3)	146,000
Alicia (2)	65,000	Mary Jane (1)	82,000
American (2)	68,000	Muriel and Russell (2)	82,000
Arlington (4)	470,000	Natale III (1)	50,000
Atlantic (4)	371,000	Neptune (4)	484,000
Bettina (1)	55,000	Newfoundland (1)	41,000
Billow (2)	251,000	Newton (4)	459,000
Boston (2)	144,000	North Star (3)	210,600
Breaker (3)	375,000	Ocean (3)	502,000
Breeze (3)	309,000	Olympia (4)	92,200
Brookline (3)	449,000	Pelican (1)	38,000
Cambridge (3)	247,000	Plymouth (3)	338,000
Cape Ann (3)	162,000	Pollyanna (2)	105,000
Catherine Saunders (1)	44,000	Quincy (4)	370,000
Comber (3)	321,000	Rainbow (4)	165,000
Cormorant (2)	232,000	Raymonde (2)	232,000
Crest (3)	428,000	Ripple (2)	220,000
Dawn (2)	87,000	Rita B. (3)	119,000
Dorchester (4)	412,000	Rose Marie (1)	68,000
Edith L. Boudreau (3)	300,000	Ruth and Margaret (1)	56,000
Elk (2)	70,000	St. George (3)	285,000
Fabia (4)	400,000	Saint Joseph (5)	148,600
Famiglia (2)	59,000	Sea (3)	435,000
Flow (4)	503,000	Sea Ranger (1)	72,000
Foam (3)	291,000	Serafina II (2)	90,000
Frances C. Denehy (2)	96,500	Shamrock (2)	88,000
Gale (2)	390,000	Spray (3)	333,000
Geraldine & Phyllis (2)	90,000	Squall (2)	289,000
Gertrude Parker (3)	138,000	Stanley B. Butler (2)	109,000
Gossoon (3)	152,000	Storm (2)	399,000
Grace F. (1)	62,000	Surf (2)	304,000
Grand Marshall (2)	103,000	Swell (2)	322,000
Hekla (2)	195,000	Thomas Whalen (4)	416,000
Helen M. (3)	88,000	Tide (2)	363,000
J. M. Marshall (1)	51,000	Triton (4)	317,000
Josie M. (2)	66,800	Vagabond (1)	32,000
Katy D. (1)	50,000	Vandal (3)	156,300
Killarney (2)	90,000	Venture II (3)	122,000
Lark (Str.) (2)	241,000	Wave (2)	272,000
Lark (4)	331,000	Wm. J. O'Brien (3)	425,000
Laura Goulart (1)	43,000	Wm. L. Putnam (2)	91,000
Liboria C. (1)	40,000	Winchester (3)	381,000
Linta (1)	55,000	Winthrop (4)	391,000
Maris Stella (2)	129,000		

26,000,000 Pounds Mackerel Landed by Seiners

Landings of mackerel by seiners at the Boston Fish Pier through the first 22 weeks of this season now total about 26 million pounds.

This tonnage is roughly double the yield for the same period last year at this port, and nearly equal to the production over a similar period in 1938.

Field observations in the mackerel investigation by the Fish and Wildlife Service are directed toward obtaining information which can be used to measure availability and study age composition of the populations in waters adjacent to the United States.

During the past month, these observations were continued at the Boston Fish Pier by F. E. Firth, Service Biological Collector. Landings by the purse-seine fleet from October 16 to November 15 amounted to about 3,250,000 pounds, slightly less than the previous period covered.

In the Cambridge office, J. R. Webster, Assistant Aquatic Biologist of the Service, has made a preliminary analysis of the purse-seine catch during the past month. This analysis reveals that the mackerel populations in and around Cape Cod Bay, where most of the fishing was done, were predominately fish with a distinct length-frequency mode at about 35 centimeters.

This group of mackerel is in all probability the same one which appeared in the spring with a modal length of 31 centimeters and weighing about 4-5 pounds. These are 2-year-old fish from the spawning of 1938.

Fulton Market Wholesale Prices

Species	Dec. 1-7	Dec. 8-14	Dec. 15-21	Dec. 22-31
Bluefish	.11-.25	.10-.22	.15-.30	.22½-.35
Butterfish	.06-.14	.04-.12	.04-.12	.04½-.10
Codfish, steak	.07-.14	.06-.12	.07-.12½	.07-.11
Codfish, mkt.	.05-.07½	.04-.07	.05-.07	.04-.09
Croakers	.05-.05½	.05-.07	.05-.08	.05-.07
Eels	.07-.10	.08-.14	.08-.20	.08-.16
Flounders	.03½-.18	.02½-.12	.02-.12½	.04-.12
Fluke	.. ..	.. ..	.13½-.13½	.. ..
Haddock	.04½-.07	.06-.08½	.05-.10	.03-.08
Hake	.05½-.09	.05-.07	.00½-.07	.02-.07
Halibut	.16-.17½	.16-.18	.16-.18	.15½-.18
King Whiting	.06½-.09	.05-.10	.05-.15	.. ..
Mackerel	.04-.16	.10-.12	.10-.20	.09-.11
Mullet	.05½-.08	.08-.08	.07-.10	.03-.07
Pollock	.03½-.06	.04-.05	.03½-.09	.03-.05
Pompano	.30-.35	.. ..	.40-.40	.32-.42
Salmon, Pac.	.15-.15	.14-.15	.14-.18	.. ..
Scup	.05-.05	.05-.09	.05-.10	.06½-.07
Sea Bass	.05-.16	.05-.16	.05-.12	.06½-.16
Sea Trout, gray	.05-.11	.05-.06	.02½-.16	.. ..
Sea Trout, spotted	.10-.22	.08-.18	.12½-.18	.16-.28
Shad	.05-.10	.05-.12½	.04-.12½	.04-.15
Silversides	.75-1.00	.50-.75	.75-3.00	1.00-5.00
Red Snapper	.12½-.16	.14-.15	.14-.17	.15-.20
Sole, gray	.03-.15	.03½-.12	.03½-.12	.08-.14
Sole, lemon	.15-.16	.14-.15	.10½-.15	.08-.10
Spanish mackerel	.10-.11½	.04-.11½	.14-.16	.10-.12
Striped bass	.15-.22	.15-.25	.16-.25	.23-.28
Tautog	.07-.07	.. ..	.. ..	.12½-.12½
Tilefish	.. ..	.. ..	.07-.07½	.. ..
Whiting	.01-.05	.00½-.03½	.00¾-.06	.02½-.06½
Yellowtails	.03-.10	.01¾-.06	.02-.08	.02-.07
Clams, hard	1.75-3.00	1.50-4.25	1.50-4.50	1.50-3.50
Clams, soft	.75-2.00	1.25-2.25	1.00-1.75	1.50-2.00
Conchs	1.75-2.50	.50-2.00	1.00-2.00	1.50-2.75
Crabs, hard	1.25-1.75	1.50-2.00	1.75-2.25	1.50-2.25
Crab meat	.15-.60	.20-.55	.20-.65	.40-1.00
Lobsters	.22-.52	.23-.47	.21-.47	.25-.47
Mussels	.50-1.00	.50-.75	.50-.75	.50-.75
Scallops, bay	4.50-5.50	2.00-5.50	2.00-5.00	3.00-5.50
Scallops, sea	1.90-1.95	2.00-2.50	1.60-1.75	.. ..
Shrimp	.10-.16	.08-.16	.09-.20	.12-.22
Squid	.06½-.07	.05-.07	.07-.08	.. ..
Frogs legs	.50-.60	.60-.65	.60-.75	.40-.75

New Fishery Council Member

Through M. C. Kenney, the New England Fish Co. is one of the latest additions to the membership of the Fishery Council.

Council Planning Model Store

The Fishery Council is planning a Model Retail Store for Fulton Market. The purpose is to educate retailers how they can make more sales and more profits through greater knowledge of merchandising and how to sell more fish to the consumer.

Details are being worked out through leaders of the industry in conjunction with the Council which is engaged in the work under its prime aim to get more fish sold. The idea has the approval of the United Fish Retailers Assoc., and it is hoped that all retailers will benefit financially by the enterprise.

Selling Fish via Radio

The Council now is selling fish via the air waves. Alfred McCann spoke last month on the health merits of fish over WOR and offered the fish cook book which the Council sends out free on request.

Mrs. Allen on WMCA devoted most of her half hour program to fish and had A. E. Kessler of the Council as a guest on the air.

Great Lakes Air Patrol

THE Great Lakes, especially Lake Michigan, has an air patrol, provided by the Michigan Conservation Department, which has been very effective in finding and confiscating illegal gill nets, which could not be detected in any other way, at least not effectively. In December, on the South end of Lake Michigan, eleven miles of gill nets are said to have been confiscated by the air patrol.

The air patrol operates over commercial fishing grounds on Lakes Michigan, Superior, Huron, St. Clair and Erie. As great distances can be covered by such a plane in a short time, commercial fishermen never know when the plane will be over the waters they are trying to steal from, which has probably deterred many net setters to think twice before attempting to break the law.

Fishermen Come to "Blows"

So keenly do the commercial fishermen of Wisconsin, on Lake Michigan, feel about the efforts of the State Conservation Commission to enforce the ruling regarding the size of nets to be used, that trouble ensues occasionally between the fishermen and the wardens on the lake.

About 20 miles off Two Rivers Harbor, on Lake Michigan, and again near Sheboygan, six fishermen are said to have purposely tried to ram a tug on which State game wardens were inspecting nets to ascertain whether or not the mesh was of legal size. The offense is called "reckless operation of a vessel," but those who think they know about the feeling that exists among some commercial fishermen against State wardens say it was an attempt to intimidate or endanger the wardens, so as to keep them away from certain locations where fishermen had their nets strung.

Now the case of the fishermen is to come before a court. Six are held but, it is said, will be released on \$250 bonds each.

Lake Huron Whitefish May Be Wiped Out

Lake Huron whitefish, the most valuable food fish in the lake, may be destined to follow other Great Lakes species into commercial extinction, according to fishery biologists of the Fish and Wildlife Service.

Introduction of the "deep trap net" in 1929—which caused overproduction through overfishing—is believed by biologists to be responsible for the present decline in abundance of the whitefish in Lake Huron. The deep trap net, equipped with a cubical lifting crib or pot as great as 50 feet on a side, could be set in waters more than 120 feet in depth, and could be moved readily from place to place in order to fish wherever whitefish were more abundant.

Since 1934, following peak yields in each of the six fishing districts in Lake Huron where the deep trap net was used, the whitefish fishery of the entire lake has continued to decline. In an attempt to halt this decline, the use of the deep trap net was restricted by Michigan law in 1935 to waters less than 80 feet in depth. The new regulation, however, brought no improvement in the fishery.

Claim Commercial Fishermen Dump Fish

It is claimed that Wisconsin fishermen dump hundreds of tons of herring each year, that is, catches are sold to the fox and mink farms of the State. The fish so disposed of, it is claimed, are good for human food, and Conservation Commissioner Mark Catlin does not think it is right to seine such a vast quantity of the herring merely to feed fur-bearing animals. Wisconsin has several of the largest mink and fox farms in this country, and, as old horses cannot always be obtained in the quantity needed for the purpose, commercial fishermen have found a market for all the herring they can catch. Most of the fish come from Lake Superior.

The State authorities are making an attempt to meet the problem, but there appears to be nothing in the Wisconsin laws to compel commercial fishermen to dispose of their catches of herring only for human consumption.



WOLVERINES
are always
ready for
MORE SERVICE

The "Norma", illustrated, of Shadyside, Md., is a Chesapeake Bay bug-eye, 72.3 x 22.1 x 6.9, engaged in freighting fish, oysters and produce. She is owned by Capt. Suthard Woodfield, of Baltimore, and is now powered with a 100 hp. 4 cyl. Wolverine Diesel.

Her old 70 hp., 3 cyl. Wolverine, which the new engine replaces, was installed in June, 1923. It has been rebuilt and shipped to Mexico for more service. All major parts in this old engine are still good.

Wolverines never die, never go for scrap, but are shifted from one boat to another, and always can be rehabilitated for more service.

Send for catalog No. 135

Wolverine Motor Works, Inc.
Union Ave. Bridgeport, Conn.

WOLVERINE

Long Island Flounder Size Limit May Not be Increased

By C. A. Horton

UNIFORM increase from six to ten inches in legal size limit for Winter flounder of the western Long Island Sound area may not be necessary as a conservation measure.

The accuracy of this conclusion, based upon results of study, is now being checked in a final investigation by Alred Perlmutter, Junior Aquatic Biologist of the Fish and Wildlife Service, United States Department of the Interior. The study is being carried on in an attempt to determine the advantages and disadvantages which would accrue to the sports and commercial fisheries by an increase in legal size limit.

Approximately 12 percent, or 34 fish, have been recaptured from tagging experiments in which approximately 350 fish were released off Hempstead Harbor on Western Long Island Sound. There has, as yet, been little evidence of migration from the general vicinity in which the fish were released to more distant parts of the Sound.

On the basis of this evidence, it is apparent that in Western Long Island Sound, an increase in the size limit to 10 inches would result in almost complete destruction of the sport fishery for Winter flounders. It would contribute nothing to the commercial fishery in that area, and would be of uncertain and limited benefit to the fisheries in other areas.

Study Catch of Small Size Food Fishes Used for Bait

To what extent small sizes of food fishes are included in bait catches by New England fishermen in this industry is one of the main objectives of a new study being made in co-operation with Suffolk County by the Fish and Wildlife Service, United States Department of the Interior.

A second feature of the work will be a survey of what saving methods are being used, and suggestions for those which can be used, to release these small sizes of food fish, in good condition, back into the sea.

Codfish Catch

The catch of cod-fish has been fair out of Montauk and Sheepshead Bay. Some of the cod tip the scales from 12 to 15 pounds. Skippers are anticipating better catches during the following Winter months.

Clams

Clams, both soft and hard, are very plentiful and of fine quality. The moderate weather of last month was an aid to the clammers.

Eels

During the eel fyking season good catches were reported of from 5,000 to 15,000 pounds each.

Former catches of up to 30,000 and sometimes 40,000 pounds are conceded to be impossible until the eel grass comes back to its former abundance.

Lack of eel grass is also felt to have adversely affected bay fishing, scalloping and even oystering.

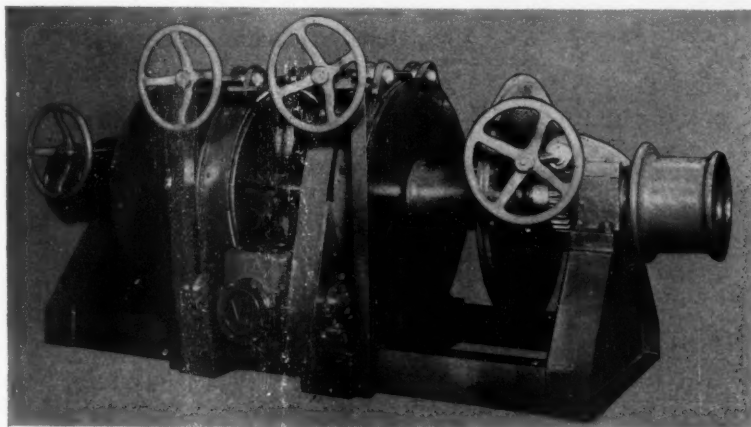
Oyster Shipments for Christmas

The J. & J. W. Elsworth Oyster Company's plant located at Greenport made big shipments of oysters for Christmas. The shipment consisted of over eight hundred individual packages of Montauk brand oysters. They were sent to all sections of the United States and to Cuba.

This year's shipments were greatly in excess of any previous years. Each of the individual packages consisted of one-half gallon of opened oysters and fifty selected oysters in the shell.

Seed Oysters Planted

During the season of 1940 the Brookhaven town trustees planted 500 bushels of seed oysters, as well as 450 bushels of seed clams on the town-owned underwater lands.



MODEL BCH

This latest model carries 350 fathom of 13/16" wire per drum and yet is unusually compact. Bed frame measures only 42"x 8' 1 1/2". It has all the patented features for which New England winches are noted. A bevel gear box in center permits direct connection to engine. Brakes are lined with moulded asbestos blocks.



**NEW ENGLAND
TRAWLER EQUIPMENT CO.**

EASTERN AVE.
CHELSEA
MASS.

New Bedford Fishermen Discuss Fish Exchange

By M. E. Harney

A FISH exchange has been planned for New Bedford and fishermen here are to vote as to whether they want such a plan or to keep on as they do now. It is said both fishermen and dealers would profit by this plan as it would cause competition, attract more vessels to this port, and give fishermen higher prices for their catches. No decision has been reached as yet.

At Peirce & Kilburn's

The scalloper 38161, skippered by Eli Pothier and owned by Sam Cahoon of Wood's Hole, has been on the ways at Peirce and Kilburn's for about ten days. The old sheathing was taken off and new put on, the pilot house enlarged, a caulking job and a painting job completed.

The new *Stanley M. Butler*, owned and skippered by Olaf Anderson, had an all-over painting at the Peirce and Kilburn shipyard.

Engineer Goes as Skipper

Joshua W. Murphy, Jr., has gone out this trip as captain of one of his father's vessels, namely, the *Huntington Sanford*. Young Murphy has always gone as engineer up until this trip. The veteran Captain Louis Doucette, who seldom strays far from the dock in the Winter, went along to give his son-in-law a helping hand.

Killed by Falling Mast

A falling mast killed Hjalmar Anderson, a crew member aboard the dragger *Alice and May*, fishing South by Southwest of Nomansland. Capt. Gerald Roche got under way at once for home but it was to no avail as hospital authorities said Anderson was dead several hours before the boat reached port. Captain Roche told police that at the time the accident happened the sea was calm and the crew members were engaged in

fishing operations when without warning a stay supporting the 45-ft. foremast let go. Anderson was caught beneath this wreckage and pulled out by John Tobin and John Amero, shipmates of Anderson. He was born in Oslo, Norway and lived in Nantucket most of the 35 years he had been in this country.

New Mack for "Alva"

The 60 ft. fishing boat *Alva*, owned by Capt. Harold Parsons and Engineer Haywood Parsons, has been equipped with a new 125 hp. Mack Diesel, turning a 38 x 28 Hyde propeller. The boat is equipped with Columbian throttle control, and was reported to have made a speed of over 11 miles per hour on her trial.

"Noreen"

The *Noreen* at Casey's is being built by Noreen, Inc., controlled by Capt. Mike Smith, Fred Lansburg, and Jerome W. Kiselik of Flagg Fish Co., Inc., New York.



The "A. Piatt Andrew", owned by Capt. Nils Kjeldsen of New Bedford, Mass., tied up at the dock of the Hathaway Oil Co. She is powered with a 100 hp. Wolverine Diesel which was installed in May, 1932.

When You Buy "Copper Clad"

you buy our Number 1 New Bedford grade manila treated with copper oleate. When you buy "Copper Clad" there is no possibility of your buying a basic material that is in any way inferior to our first-quality manila, as we definitely will not treat any other grade than that with copper oleate. That's why lobstermen, particularly, prefer "Copper Clad"—the New Bedford copper oleated rope.



New Bedford Cordage Co.

General Offices: 233 Broadway, N. Y. C.
 Boston: 31 St. James Ave. Chicago: 230 W. Huron St.
 Mills: New Bedford, Mass.

SHIPMATE



Isn't it a fact when a dealer says "This range is just as good as SHIPMATE" that he is giving SHIPMATE the highest possible praise? Isn't he admitting that SHIPMATE is the standard to which he is comparing the particular appliance he is trying to sell?

Don't be fooled by this. There is no galley range that is "just as good as SHIPMATE." Fishermen know this from nearly sixty years of experience with SHIPMATES.

SHIPMATES are made only by
THE STAMFORD FOUNDRY COMPANY
 Established 1830 Stamford, Conn.

RANGES

New Brunswick Fishermen Enjoy Excellent Scallop Season

By C. A. Dixon

FISHERMEN in New Brunswick have enjoyed an excellent period of scallop fishing this Fall and early Winter, and with a good demand and satisfactory prices, considerable money has been made by many engaged in this branch of the fishing industry. For the last few years, scallop fishing in the Charlotte County part of the Bay of Fundy has been unprofitable until this Fall when new beds were located or old ones re-explored. Other areas worked to good advantage were those in St. Andrews Bay and the waters surrounding Grand Manan, farther out in the Bay of Fundy.

Fine Catches of Sardine Herring

Open weather in a mid-month period in December permitted fishermen in Southern New Brunswick to make some fine catches of sardine herring, the best fish in respect to size that had come to the Canadian factories during the Fall months when fish receipts in general showed a considerable percentage of large ones. Most of the "new school" was taken in the Wolves Islands fishing area of the Bay of Fundy and along the Northern shore of Charlotte County, by seiners and drivers, chiefly the latter in some localities. Some fish were also obtained at Grand Manan. Both the Canadian sardine plants, located at Black's Harbour and Fairhaven, respectively, got good supplies, and fishermen, boatmen, and employees fared well just before the Christmas holiday period. The factories were closed down at Christmastime but it is understood that they will be operated all Winter if fish in sufficient quantities are made available. The demand for canned goods is very keen, and as the output in 1940 was sub-normal, there will be no cessation in canning activities—a condition which makes good news for everyone engaged in the sardine fishing industry at all coastal points in the Bay of Fundy region where sardines are caught.

Prices for the manufactured article are firm at \$3.50 a case with prospects of a further advance. 1941 should be a great year for everyone engaged in fishing for sardines, whether by the use of seines, or weirs; and already some of the Canadian weirmen have stocks of brush and other building material on the banks in readiness for very early Spring operations. Barring destruction by ice there should be a lot of weirs "ready for the twine" early in April or in time for the legal Maine opening of the factories on April 15.

Lobstermen Get Good Prices

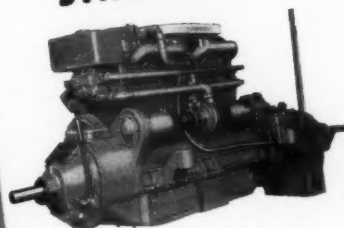
Toward the latter part of the Fall lobster fishing season in Charlotte County, which opened November 15 and closed December 30, prices for the crustaceans gradually rose from a new low in the first of the season to fairly satisfactory levels, and at last, just before Christmas, the Grand Manan lobstermen got the price they expected at the first of the season, namely 24 cents each for the shellfish, one cent less than their demand before the season opened; and lobsters later were sold for seventeen cents each and fifteen, it is said. Lobsters are sold by the piece at Grand Manan, and not by the pound like they are in other places in Charlotte County. Fishermen at Deer Island, Campobello and along the mainland coast of Charlotte County sell their catches by the pound and realize considerable more for each fish than do their Grand Manan brother fishermen, owing to the fact that the shellfish in the districts named above are larger than the Grand Manan variety, which probably average one and one half pounds each.

Haddock Fishing Good

Campobello haddock fishermen, after cleaning up the St. Andrews Bay region pretty well in a short time, have been doing better at outside points in December, and pre-Christmas landings brought in some real money to some of the families of local trawlers, who disposed of the greater part of their catches in Maine markets.

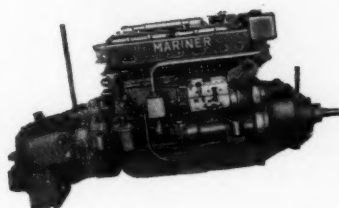
Captains and Owners Acclaim Mack Mariners

**QUICK-AS-A-WINK
STARTING!**



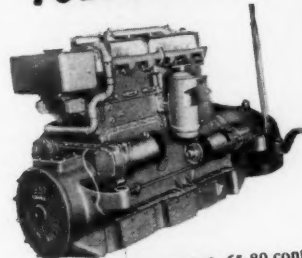
519 W FOR WORKBOATS, 80-100 cont.
sustained h.p., speeds of 1500-1800
R.P.M. Bore 4 $\frac{3}{4}$ ", Stroke 5 $\frac{3}{4}$ "—6 cyl-
inders, Lanova combustion.

**SMOOTH-AS-SILK
POWER!**



605 W FOR WORKBOATS, 100-125
sustained h.p., speeds of 1500-1800
R.P.M. Bore 4 $\frac{3}{4}$ ", Stroke 6"—6 cyl-
inders, Lanova combustion.

**LOWEST
FUEL COST!**



405 W FOR WORKBOATS, 65-80 cont.
sustained h.p., at speeds of 1500-
1800 R.P.M. Bore 4", Stroke 5 $\frac{3}{4}$ "
—6 cylinders, Lanova combustion.

Why don't you install this finest
of modern Diesels in your boat?
MACK MANUFACTURING CO., NEW YORK, N. Y.

Mack

DIESEL MARINE POWER

Mack provides direct factory branch service
at 28 tide-water and 14 fresh-water ports

Lunenburg Schooners Altered

By H. R. Arenburg

ALTERATIONS have been made in the rig of the schooner *Bluenose*, converting her into a craft of the knockabout type. To accomplish this, her bowsprit has been removed and her spars have been shortened. After these alterations were made, she was rigged by Paul Myra and staff.

The tern schooner *Maid of France*, which has been undergoing alterations at the shipyards of Robar Brothers at Day-spring, was brought to Lunenburg, where her accommodations were finished and engines were installed. This craft is owned by Capt. A. S. Publicover of West Dublin.

Ready to Resume Fishing

Practically all the schooners of the fleet were in port for the Christmas holidays. Most of them usually return to port for a few days, but this Winter the fresh fishing has been so meagre that they are practically all in the harbor and many of them are being overhauled and cleaned up to resume fishing.

Lobstermen Doing Well

The lobster fishermen in Lunenburg County have been doing very well since the opening of the season the first of the month. Catches have been fairly good and the price very good.

Weather Hampers Fishing

The schooners in the Lunenburg fresh fishing fleet did little or no fishing during the month of December. The weather was most inclement and the fish were scarce. Several of the schooners did not take sufficient fish to warrant their returning to Lunenburg and they landed what small catches they took at North Sydney. Among the fish that were landed here during the month were 85,000 pounds from the schooner *Marilyn Claire*, Captain Demone; 35,000 pounds from the schooner *Besemer*, Capt. Thomas Himmelman; and 25,000 each from the schooners *Marshal Frank*, Capt. Frank Risser, and *R. B. Bennett*, Capt. Albert Crouse.

Stover Adds to Line of Small Diesel Engines

THE Stover Manufacturing & Engine Company of Freeport, Illinois, now have ready for delivery a new line of Diesel engines, equipped with the Lanova combustion chamber, that develop more power per cubic displacement and per pound, and that can be sold at proportionately lower cost. These new Stover Diesels are smoother running and more economical to operate. They now are available in four sizes and with a variety of mountings. The 7 $\frac{1}{2}$ hp. and 10 hp. models are single cylinder. The 15 hp. and 20 hp. models are of the twin cylinder type. The illustration shows the conventional stationary type of mounting. The twin cylinder models have No. 1 Bell housing. Stover's Diesel Bulletin No. 51 provides complete information covering this new line of Diesels.

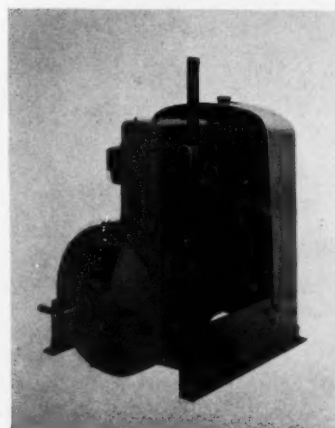


Photo showing the
conventional station-
ary type of mounting
on the new Stover
Diesels.



Pettit's Marine Paints are especially made for you commercial fishermen. Close contact with your industry for many years has taught us your problems.

Pettit's Marine Paints are formulated to overcome your paint troubles. They are dependable, durable and economical because there is a full measure of Practical Experience in every can.

If your dealer can't supply you, write us direct

PETTIT PAINT COMPANY, INC.
507-519 Main St. Belleville, N.J.

"We have covered the waterfront since 1861"

PAINT PETTIT and see what Service means

**KINNEY
CLUTCHES**

for
TRAWLING GEAR
and other auxiliaries



on both
**SMALL and LARGE
BOATS**

Kinney Clutches have proved their dependability in years of service on fishing boats.

Write to us or to the nearest dealer listed for Bulletin and prices.



With the Vineyard Fishermen

By J. C. Allen

THE end of 1940 is aboard as this entry is made in the log. It has been a peculiar year in many respects; a terrifying sort of year, all things being considered. Men and things have changed during the past twelve months with all of the suddenness of a twister swooping down to lift the sticks right out of a vessel, leaving her a drifting hulk in the trough of the sea.

In all international affairs, this fact has loomed distinctly, and has shaken all hands to the keelson, and no blasted wonder. But the changes have taken place in minor things as well and no man can safely predict what the outcome will be. Much of this change was felt during the past month and this being the log of the final month of the year, it is timely to chalk down a memorandum for future reference.

The Luck of the Fleet

Luck with the fleet was average or better, taking things full and by. With the exception of one week when everything went cockeyed, as it does every now and then, no one could complain of the market. Yellowtails, which are the staff of life everywhere inshore and even in bold water at this time of year, picked up plenty during the mid-section of the month and the small vessels had such dragging as they hadn't seen in many a blasted moon. It was noticeable, as it had been for some time that the flounders were scarce. It's getting so that a good, large blackback is worth as much as a summer fluke and a Summer fluke has been bringing about five times what it was worth for years. This was one change that has seemed to strike with more forcefulness than before.

Mackerel Still Running

Another is the continued presence of the mackerel in local waters, where the seiners have found them all through the month. The cold weather; and it has been cool; seemed not to disturb these fish at all. A few snow-squalls will undoubtedly have some effect on them and the temperature of the water, but again, it makes a man stop and think. The old-fashioned spring drag-netting has pretty well gone to looword. Even the gang who used to head to the sutherland in early spring have pretty well given it up. If mackerel are going to run twelve months in the year, what a capsizing of the market will take place!

Bay Scallops

And the bay scallops; they used to be just as good as cash. This year, more than any other since that kind of shell-fishing began, the gang made wages and little else. While wages are not to be sneezed at, it makes a man stop and ponder when he earns, say, thirty-five dollars in the same period in which his father earned eight hundred.

Eelers' Luck

The local bunch of eelers struck things average well, but here is another curious, little change which may not effect many men, but is noticeable just the same. It's only a few years back when Marthas Vineyard was making its regular Christmas shipments of silver eels. This was pretty nearly the only place that caught and marketed them. They brought a devil of a price, and they were all large. Now, by Judas, a real large eel isn't worth as much as a medium-sized one. There weren't any silver eels taken this Fall, however, so this branch of the industry wasn't effected.

Would Stop Seining of Striped Bass

Now comes a repetition of the effort to cut out seining of striped bass. It has been tried before but without effect. There is no question as to the honesty and good intent of the men astern of this movement, nor can anyone doubt the honesty of the commercial fishermen who oppose it. The plain fact is that not a cussed soul this side of the blazing hinges of Tophet knows a cussed thing about striped bass!

Best Wishes to All Hands

Belatedly, herewith our best wishes to all hands, afloat and alongshore. The landmen have plenty of people to think of them and we will just loose all our efforts in behalf of the lads between four and forty fathoms.

National Supply Co. Appoints Manager of Engine Sales

THE National Supply Company recently announced the appointment of Fred R. Lowell as its Manager of Engine Sales, Superior Engine Division.

Mr. Lowell has been affiliated with The National Supply organization since April, 1936, when he assumed charge of the company's Commercial Engine Sales in the Southwest with headquarters at Houston, Texas. In January, 1940, he was transferred to Springfield, Ohio, to become Manager of Oil Field Engine Sales and occupied this position at the time of his present appointment.

Following his graduation from the University of Wisconsin in Engineering in 1926, Mr. Lowell associated with the Engineering Department of Fairbanks, Morse & Company. In 1928 he joined the Engine Sales Staff at the Chicago office and in June, 1933, became Fairbanks representative to the Philippine Islands in charge of Sales and Service of all the company's products.

In June, 1933, he was made Manager of Export Division Machinery Department of Fairbanks-Morse with headquarters in New York. Mr. Lowell resigned this position in April, 1936, to join the National's Sales Staff.

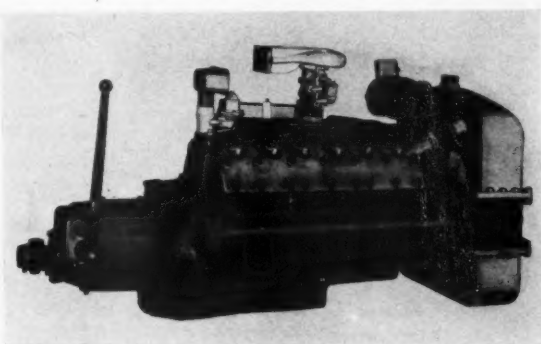


Fred R. Lowell, Mgr. of Engine Sales, The National Supply Co.

New Model New England Winch

THE New England Trawler Equipment Co., Eastern Avenue, Chelsea, Mass., has a new model winch, bevel-gear driven, with capacity half-way between their Model C and Model D sizes. While this new model, BCH, is extremely compact, all shafts and bearings are the same size as on other standard models.

This model is being installed on Captain Rocha's new vessel the *Lady of Good Voyage*, and the New England Trawler Equipment Co., anticipating the popularity of this new winch, are starting quantity manufacture for stock deliveries.



Lehman-Zephyr Model Z5 conversion of Lincoln-Zephyr 120 hp. engine, with self-contained fresh water heat transfer system and heavy duty reverse gear.



is of the

FINEST QUALITY

Skillfully Manufactured to give

UNEXCELLED SERVICE

under all fishing conditions

A COMPLETE LINE

Cotton Netting for Seines, Traps and Pounds; Cotton and Linen Gill Netting; Ropes; Corks and Fittings.

READY STOCKS AT IMPORTANT POINTS

Branch Offices

Gloucester, Mass.
Philadelphia, Pa.
Baltimore, Md.
Miami, Fla.
Biloxi, Miss.

Representatives

Sargent, Lord & Co., Portland, Me.
A. H. Brebner, Erie, Pa.
Flood & Calvert, Galveston, Texas
D. A. Turner, Port Huron, Mich.
M. J. Kramer, Escanaba, Mich.

R. J. EDERER COMPANY

Home Office: 540 Orleans St. Chicago, Ill.

Trawler Repairs

... BY BETHLEHEM



View of Atlantic Yard, East Boston

Bethlehem maintains two modern ship-repair yards, the Atlantic Yard and the Simpson Yard, on Boston Harbor. Both have unexcelled facilities for the repairing and reconditioning of trawlers. In addition, Bethlehem's Fore River Yard is fully equipped to build modern Diesel fishing vessels.



BETHLEHEM STEEL COMPANY Shipbuilding Division

GENERAL OFFICES: New York, N.Y., and Quincy, Mass.
BOSTON OFFICE: 75 Federal Street

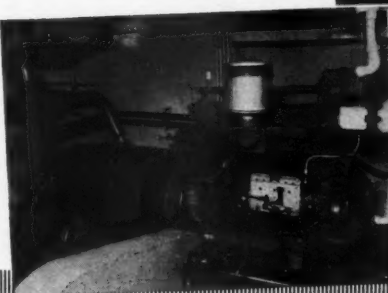
BUDA-LANOVA Diesel Electric Generating Units

LOW COST ELECTRICITY FOR
ALL MARINE REQUIREMENTS

THERE is a complete range of Buda-Lanova Diesel Electric Generating Sets from 10 Kw. to 100 Kw. These sturdy units are built to save you money, by providing dependable service 24 hours a day—and users report costs as low as 3/4 cents per kilowatt hour. Write for complete information today.

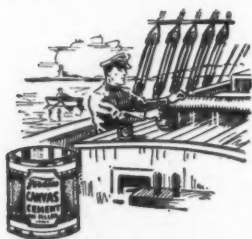
THE BUDA COMPANY

15400 Commercial Ave. Harvey (Chicago Suburb) Ill.



Buda-Lanova 25 Kw. and 35 Kw. Diesel Electric Generator Sets provide electricity aboard "SYLVIA T", owned by Central Barge Co., Joliet, Ill.

USE FERDICO CANVAS CEMENT



to cement canvas to your decks and cabin-tops. Also use it as a filler on top of the canvas. You will thereby prolong the life of the canvas, and greatly increase its all-round efficiency.

For complete directions, write us for a free copy of the illustrated folder, "Laying Canvas."

L.W. Ferdinand & Co., Inc.

549 Albany Street

— Est. 1874 —

Boston, Mass.

The Linen Thread Co., Inc.

Gold Medal Cotton Nets and Twines

A. N. & T. Coy Linen Nets

Manila Trawls, Burnham Lines

Sales Offices:

New York

Boston

Gloucester

Baltimore

Chicago

San Francisco

PALMER DIESEL and GASOLINE ENGINES

manufactured in

1-2-3-4 & 6 CYLINDERS

send for catalog

PALMER BROS. ENGINES, Inc., COS COB, CONN.

Cooper-Bessemer President Charles B. Jahnke

THE resignation of B. B. Williams as president of The Cooper-Bessemer Corporation, and election of Charles B. Jahnke as his successor, was announced December 28, following a meeting of the corporation's board of directors in Mount Vernon, Ohio.

Mr. Williams was made chairman of the board of directors, succeeding Dr. E. J. Fithian of Grove City, Pennsylvania, who resigned his position. The new chairman expects to continue in an active capacity as the head of the corporation. Mr. Jahnke, who has been vice-president and general manager for the past two-and-a-half years, will act as president and general manager and will serve as a member of the executive committee. Dr. Fithian, one of the founders of the Bessemer Gas Engine Company, and its president for several years, will continue as a member of the board of directors.

The new president has been with The Cooper-Bessemer Corporation since 1935, having served two-and-a-half years as chief engineer and since July 1937, as vice-president and general manager. He came to Cooper-Bessemer as a Diesel engineer, with an extensive background and training in engineering work with that type of engine.

Reared at Cincinnati, Mr. Jahnke was graduated from the University of Cincinnati in 1910 and then worked for twenty-



B. B. Williams and Charles B. Jahnke.

one years with Fairbanks, Morse & Company, at Beloit, Wisconsin, first as chief engineer and later as works manager of the Beloit plant. He later served as director of engineering after the Fairbanks-Morse management was changed to concentrate all activities of the company at Beloit. In 1931 he went to Chicago to join the International Harvester Company in their program of developing Diesel engines for farm machinery. Four years later he became affiliated with Cooper-Bessemer at Mount Vernon.

Mr. Williams, the retiring president, has been with The Cooper-Bessemer Corporation and its predecessor, the C. & G.

TANGLEFIN NETTING

"CATCHES MORE FISH"

LINEN & COTTON GILL NETTING
SEINE, POUND & TRAP NETTING

LUDLOW MANUFACTURING & SALES CO.,
NATIONAL NET & TWINE DIVISION

211 CONGRESS ST., BOSTON, MASS.

Cooper Company, for forty years. In 1900 he joined the Cooper Company as a Sales engineer, and was made secretary in 1912. Four years later he became vice-president and general manager, and in 1920 was elected president, a position he retained when the Cooper Company was merged with Bessemer in 1929 to form the present corporation. In becoming chairman of the board, Mr. Williams will not retire into an inactive capacity, but will retain an active voice in the company's affairs.



Donald R. Robison and Gail E. Spain.

Caterpillar Tractor Co. Advances Two in Its Organization

DONALD R. Robison has been made a vice-president of the company with administrative direction of all selling and advertising activities. The office of general sales manager, which Mr. Robison leaves to assume his higher duties and responsibilities is being filled by the advancement of Gail E. Spain.

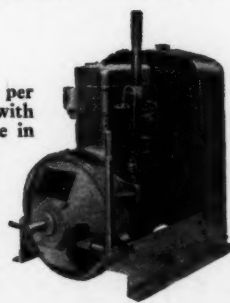
Mr. Robison, a native of Nevada, has been closely associated with Caterpillar Tractor Co. activities for many years. He was graduated from the University of Nevada with a business degree, and almost immediately went to work for the company. Since 1926 he has advanced rapidly through the various activities in the credit and treasury department, to the office of assistant treasurer, treasurer and then general sales manager.

Mr. Spain came from Portland, Oregon, and received the degree of Mechanical Engineer at Oregon State College. In 1920 he went to work for the Willamette Iron & Steel Works at Portland, and during his nine years with that concern advanced through the engineering and sales departments. For two years before coming to "Caterpillar", Mr. Spain was Willamette's Sales Manager.

In 1929, he joined the "Caterpillar" organization at San Leandro, California, being transferred to Peoria, Illinois, in the summer of that same year. Mr. Spain held positions in the Merchandise, Engine Sales and General Sales departments. Since 1938 he has been Manager of the Sales Development Division.

STOVER TWO CYLINDER LANOVA DIESEL ENGINES Are Now Ready

Smoother running. More power per cubic displacement and per pound, with proportionate lower cost. Available in 4 sizes and a variety of mounting bases. 7½ and 10 H.P. models are single cylinder. 15 and 20 H.P. are twin cylinder. Illustration shows conventional stationary type. Twin cylinder models have No. 1 Bell housing. Write Dept. D104A for Bulletin No. 51 with complete information.



STOVER MFG. & ENGINE CO., Freeport, Ill.

BUILD AT IPSWICH

**We operate a modern,
enclosed plant with complete
facilities for wood
and composite construction**

W. A. ROBINSON, INC.
IPSWICH, MASSACHUSETTS

Specialists in Fishing and Commercial Craft



**FROST BRAND
"SUPERIOR"
OIL CLOTHING**

A first quality garment made
to meet the requirements and
approval of the fishermen.

Manufactured by

D. O. FROST CORPORATION
Factory and Office, 5-7-9-11 Wharf St.
GLOUCESTER MASS.

When You Ship FISH, LOBSTERS
or SCALLOPS to the Boston Market
FOR BEST RESULTS SHIP TO
R. S. HAMILTON COMPANY

On the Boston Market over 30 Years
17 Administration Building Fish Pier, Boston, Mass.

FOR SALE**Second Hand Engines**

Hall-Scott 150 H.P. \$195.00—Red Wing 80-100 H.P. \$240.00
—Superior Diesel, 62 H.P. \$350.00—Buda 65-85 H.P. \$295.00
—Speedway (pair) 300 H.P. \$420.00 each.
—Universal generator set, 110V 4 K.W., \$195.00.
Rapp-Huckins Company, Inc. 138-148 Beverly St.
Boston, Mass.

Italian Rope

We have on hand a few coils of Italian Hemp Bolt rope,
first quality, in sizes 1 3/4", 1 5/8" and 1 1/2" circumference.
Address LaNasa Hardware Company, 1027 Decatur St., New
Orleans, La.

Schooner Mainsail

60 ft. boom, 41 ft. hoist, and 34 ft. 6" gaff. Frank F. Upson,
Sail Maker, New Haven, Conn. Also for sale 26 ft. Sea Bright
skiff; would make a good lobster boat.

Two Buda Diesels

Two 125 hp. Buda Marine Diesels. Bosch injectors and
pumps. \$1000.00 each or \$1750.00 for the pair. Engines in
excellent running condition. Roberts Boat & Engine Equipment
Service, Box 2616, Lakewood, Ohio.

Atlas Imperial Diesel Engine

70 hp., 4 cylinder, 7 1/2 x 10 1/2, reverse gear, Atlas Imperial,
good running condition. Address L. R. Beatty, 632 Race St.,
Philadelphia, Pa.

Oyster Boat

Oyster boat *Alert*, length 48 ft., beam 14 1/2 ft., depth 4 ft.
Hoist, shaft and propeller. No engine. Price reasonable. Apply
Box WAH, Atlantic Fisherman, Goffstown, N. H.

Oil Screw Vessel "Cupid"

One oil screw vessel, *Cupid*, 3 cylinder, 45 hp. C.O. Diesel
engine, 56 feet long, 17 ft. wide and 5 ft., 6 in. deep. Address
Cedar Island Oyster Co., Inc., Greenport, N. Y.

"Diesel Monitor"

A new book, entirely in the form of over 3,000 questions
and answers, 530 pages, size 5" x 7", profusely illustrated,
price \$5.00 prepaid. This new book by the well known author,
Julius Rosbloom, is considered to be the most valuable book
yet created for Diesel engineers. A complete course on Diesel
engineering. All license laws are covered in this book, includ-
ing rules for small craft marine licenses. Obtainable from
Atlantic Fisherman, Goffstown, N. H.

Where to Ship

Companies in the market for fish and shellfish.

BOSTON, MASS.

R. S. Hamilton Co., 17 Administration Bldg., Fish Pier.

CHICAGO, ILL.

J. A. Klafin, 209 N. Union Ave.

NEW YORK, N. Y.

Beyer Fish Co., Fulton Fish Market.

John Dais Co., Fulton Market.

Lester & Toner, Inc., Fulton Fish Market.

South Fish Co., 31 Fulton Fish Market.

Frank W. Wilkison, Inc., 16 Fulton Market.

PHILADELPHIA, PA.

C. E. Warner Co., Inc., 8 Dock St. Fish Market.

Fairbanks-Morse Installations

A FAIRBANKS-MORSE 4 cylinder, 8 3/4 x 10 1/2, 120 hp.
at 450 rpm., Model 35E, marine Diesel engine is being
installed in the *Two Brothers*, a converted yacht formerly
called the *Pocomo*, by the Hitchcock Gas Engine Co., of
Bridgeport, Conn. The *Two Brothers* will operate from
Stonington.

The *Rosalie F.*, which was launched on January 4 at the
shipyard of Harry Mogck & Sons, Cape May, N. J., for the
Gloria F. Fishing Corp. of New York City, will be equipped
with a Fairbanks-Morse 5-cylinder, Model 35E, 10 x 12 1/2,
marine Diesel engine, starboard rotation, rated 200 hp. at
400 rpm.

"Osco" Chart

THE Osco Motors Corp., Philadelphia, Pa., has prepared
a novel and interesting chart giving cost figures on fuel
consumption. Copies of this chart are available upon
request.

Index to Advertisers

Atlas Imperial Diesel Engine Co.....	3
Bethlehem Steel Co., Shipbuilding Division.....	23
The Buda Company.....	24
Caterpillar Tractor Co.....	4
Columbian Rope Co.....	Front cover
The Cooper-Bessemer Corp.....	Back cover
R. J. Ederer Co.....	23
L. W. Ferdinand & Co., Inc.....	24
D. O. Frost Corp.....	25
R. S. Hamilton Co.....	26
Hathaway Machinery Co.....	26
Kinney Mfg. Co.....	22
The Linen Thread Co., Inc.....	24
Mack Mfg. Corp.....	21
National Net & Twine.....	25
The National Supply Co.....	Inside front cover
New Bedford Cordage Co.....	20
New England Trawler Equipment Co.....	19
Palmer Bros. Engines, Inc.....	24
Pettit Paint Co.....	22
W. A. Robinson, Inc.....	25
The Stamford Foundry Co.....	20
Stover Mfg. & Engine Co.....	25
Superior Diesels.....	Inside front cover
Where to Buy Directory	Inside back cover
Where to Ship Directory	26
Wolverine Motor Works, Inc.....	18

Hathaway Machinery Co.

Original

Flax Packed

STERN BEARINGS

Fairhaven, Mass.

Where-to-Buy Directory

Equipment, Gear, Supplies, Service

Companies whose names are starred (*) have display advertisements in this issue; see Index to Advertisers for page numbers.

ANCHORS

Northill Co., Inc., 902 Thompson Ave., Glendale, Calif.

BATTERIES

Dry Cell

"Eveready"; National Carbon Co., Inc., 30 E. 42nd St., New York, N. Y.

Storage

Edison Storage Battery Co., West Orange, N. J.
"Exide"; Electric Storage Battery Co., Philadelphia, Pa.

Willard Storage Battery Co., Cleveland, Ohio.

BENZOATED BRINE

Seydel Chemical Company, Jersey City, N. J.

BOAT EQUIPMENT & SUPPLIES

The E. J. Willis Co., 91 Chambers St., New York, N. Y.

CAN MANUFACTURERS

Continental Can Co., 100 E. 42nd St., New York, N. Y.

Crown Can Co., Philadelphia, Pa.

National Can Corporation, 110 E. 42nd St., New York, N. Y.

CEDAR FLOATS

Great Lakes Mfg. Co., Bayfield, Wis.

CLUTCHES

*Kinney Mfg. Co., 3541 Washington St., Boston, Mass.

COLD STORAGEES

Quaker City Cold Storage Co., Philadelphia, Pa.
Western Refrigerating Co., 18-20 E. Hubbard St., Chicago, Ill.

CONTAINERS (Paper)

F-F-V Equipment Corp., 204 Real Estate Exchange Bldg., Richmond, Va.

CORDAGE MANUFACTURERS

American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.

*Columbian Rope Co., Auburn, N. Y.

*New Bedford Cordage Co., 233 Broadway, New York, N. Y.

Plymouth Cordage Co., North Plymouth, Mass.
Wall Rope Works, 48 South St., New York.

Whitlock Cordage Co., 46 South St., New York, N. Y.

CYLINDER LINERS, PISTONS, RINGS

Hunt-Spiller Manufacturing Co., 383 Dorchester Ave., Boston, Mass.

DEPTH FINDERS

Submarine Signal Co., 160 State St., Boston, Mass.

DIESEL GENERATING SETS

Bolinders Co., 33 Rector St., New York, N. Y.
Diesel Engine Sales & Engineering Corp., 263 Northern Ave., Boston, Mass.

ELECTRICAL EQUIPMENT

Diehl Manufacturing Co., 75 Kneeland St., Boston, Mass.

General Electric Co., Schenectady, N. Y.

ENGINE MANUFACTURERS

Diesel Engines

*Atlas Imperial Diesel Engine Co., 115 Broad St., New York, N. Y.

Bolinders Co., 33 Rector St., New York, N. Y.
*The Buda Co., Harvey, Ill.

*Caterpillar Tractor Co., Peoria, Ill.

*Cooper-Bessemer Corp., Mount Vernon, O.
Covic Diesel Div., Northill Co., Inc., 902 Thompson Ave., Glendale, Calif.

Cummins Engine Co., Columbus, Ind.

Fairbanks, Morse & Co., Chicago, Ill.

Gray Marine Motor Co., 646 Canton Ave., Detroit, Mich.

The Lathrop Engine Co., Mystic, Conn. *

*Mack Mfg. Corp., Long Island City, N. Y.

*The National Supply Co., Superior Diesels, Springfield, Ohio; Philadelphia, Pa.

Osco Motors Corp., 3648A No. Lawrence St., Philadelphia, Pa.

*Palmer Bros. Engines, Inc., 14 Water St., Cos Cob, Conn.

Red Wing Motor Co., Red Wing, Minn.

*Stover Mfg. & Engine Co., Freeport, Ill.

*Wolverine Motor Works, Inc., 1 Union Ave., Bridgeport, Conn.

Worthington Pump & Machinery Corp., 421 Worthington Ave., Harrison, N. J.

Ford Conversions and Parts

Lelham Engineering Co., 972 Broad St., Newark, N. J.

*Palmer Bros. Engines, Inc., 14 Water St., Cos Cob, Conn.

Osco Motors Corp., 3648A No. Lawrence St., Philadelphia, Pa.

Fuel Oil Engines

Red Wing Motor Co., Red Wing, Minn.

Gasoline Engines

*The Buda Co., Harvey, Ill.

Chrysler Corporation, Marine Engine Division, Detroit, Mich.

Gray Marine Motor Co., 646 Canton Ave., Detroit, Mich.

The Lathrop Engine Co., Mystic, Conn.

*Palmer Bros. Engines, Inc., 14 Water St., Cos Cob, Conn.

Red Wing Motor Co., Red Wing, Minn.

*Wolverine Motor Works, Inc., 1 Union Ave., Bridgeport, Conn.

FISHING GEAR

The Great Grimsby Coal, Salt and Tanning Co., Ltd., Grimsby, England.

FISH SCALERS

Portable, Flexible Shaft

N. A. Strand & Co., 5001 N. Lincoln St., Chicago, Ill.

FLOAT DOPE

Wisconsin Paint Mfg. Co., Inc., 3710 North Richards St., Milwaukee, Wis.

GLUE

*L. W. Ferdinand & Co., 599 Albany St., Boston, Mass.

HARPOONS

Island Harpoon Co., Hempstead, L. I., N. Y.

HOOKS, Fish

Bill DeWitt Baits, Hook Mfrs., Auburn, N. Y.

"Mustad": Sidney R. Baxter & Co., 90 Commercial St., Boston, Mass.

ICE BREAKERS

"Creasey": Gifford-Wood Co., Hudson, N. Y.

NAUTICAL INSTRUMENTS

Kelvin-White Co., 90 State St., Boston, Mass.

NAVAL ARCHITECTS

John G. Alden, 131 State St., Boston, Mass.

Eldredge-McInnis, Inc., 131 State St., Boston, Mass.

NETS AND NETTING

W. A. Augur, Inc., 35 Fulton St., New York, N. Y.

*R. J. Ederer Co., 540 Orleans St., Chicago, Ill.

The Great Grimsby Coal, Salt and Tanning Co., Ltd., Grimsby, England

*The Linen Thread Co., Inc., 575 Atlantic Ave., Boston, Mass.

*National Net & Twine Co., 211 Congress St., Boston, Mass.

A. M. Starr Net Co., E. Hampton, Conn.

NET PRESERVATIVES

"Campbell's Copper Compound": International Chain & Mfg. Co., York, Pa.

OILS (Fuel, Lubricating, Gasoline)

"Essomarine": Penola, Inc., 26 Broadway, New York, N. Y.

Shell Oil Co., Inc., 50 West 50th St., New York, N. Y.

Standard Oil Co. of Calif., Standard Oil Bldg., San Francisco, Calif.

OILED AND RUBBER CLOTHING

J. F. Carter Co., Beverly, Mass.

*D. O. Frost Corp., Gloucester, Mass.

Hodgman Rubber Co., Framingham, Mass.

M. L. Snyder & Son, 1812-72 E. Boston Ave., Philadelphia, Pa.

PAINTS

*Pettit Paint Co., Belleville, N. J.

Tarr & Wonsan, Ltd., Gloucester, Mass.

PROPELLERS

Columbian Bronze Corp., Freeport, N. Y.

Hyde Windlass Co., Bath, Me.

Michigan Wheel Corp., Grand Rapids, Mich.

RADIO DIRECTION FINDERS

Cape Cod Instrument Co., Hyannis, Mass.

Fisher Research Laboratory, 1961 University Ave., Palo Alto, Calif.

General Communication Co., 677 Beacon St., Boston, Mass.

Western Electric Co., Specialty Products Div., 300 Central Ave., Kearny, N. J.

RADIO TELEPHONES

Western Electric Co., Specialty Products Div., 300 Central Ave., Kearny, N. J.

RANGES

*"Shipmate": Stamford Foundry Co., Stamford, Conn.

REVERSE & REDUCTION GEARS

Snow & Petrelli Mfg. Co., 25 Fox St., New Haven, Conn.

Twin Disc Clutch Co., 1341 Racine St., Racine, Wis.

SHIPBUILDERS, BOATYARDS

Casey Boat Building Co., Fairhaven, Mass.

The Charleston Shipbuilding & Drydock Co., Charleston, S. C.

*Bethlehem Steel Co., Shipbuilding Division, Bethlehem, Pa.

*W. A. Robinson, Inc., Ipswich, Mass.

SHIP CHANDLERS

Sargent, Lord & Co., 40 Portland Pier, Portland, Me.

STEERING GEAR

The Edson Corp., 49-51 D St., South Boston, Mass.

STERN BEARINGS

*Hathaway Machinery Co., New Bedford, Mass.

TELEGRAPH SERVICE

Postal Telegraph, 67 Broad St., New York, N. Y.

THRUST BEARINGS

Kingsbury Machine Works, Inc., 4316-28 Tackawanna St., Frankford, Philadelphia, Pa.

TRAWLING EQUIPMENT

*New England Trawling Equipment Co., 301 Eastern Ave., Chelsea, Mass.

WIRE BASKETS

Massillon Wire Basket Co., 204 4th St., N.W., Massillon, Ohio.

WIRE ROPE

Bethlehem Steel Co., Bethlehem, Pa.

Twice POWERED by C-B DIESELS



Skipper John Chianciola, of Gloucester, wanted more power for a different type of fishing. As a result, his schooner "Alicia" has twice been powered with Cooper-Bessemer Diesels! . . . 12 years ago for gill-netting, now for dragging. The new engine is a Type FP, four-cylinder, marine-gear Diesel, rated 120 hp. This is the fifth time that Mr. Chianciola has "cast his vote" for C-B Diesels.

ANOTHER C-B ADVANTAGE: Crankshafts on C-B Diesels are run through full size for winch connections. Full power can be taken off the forward end for beam trawling.

THE COOPER-BESSEMER CORPORATION

25 West 43rd St., New York City
Investment Bldg., Washington, D. C.

The Pacific Marine Supply Co., Seattle, Washington

Mt. Vernon, Ohio — PLANTS — Grove City, Pennsylvania

49 Duncan St., Gloucester, Mass.
529 M & M Bldg., Houston, Texas

Lunenburg Foundry Co., Ltd., Lunenburg, Nova Scotia

Calmes Engineering Co., New Orleans, La.
640 East 61st St., Los Angeles, Calif.

1501 Arcade Bldg., St. Louis, Missouri

Printed in U.S.A.
Lew A. Cummings Co.
Manchester, N. H.

